

CHRONICLE OF THE WORLD HEALTH ORGANIZATION

Volume 1, 1947

WORLD HEALTH ORGANIZATION
INTERIM COMMISSION

350, Fifth Avenue NEW YORK Palais des Nations GENEVA



CHRONICLE OF THE WORLD HEALTH ORGANIZATION

Development and Constitution of the W. H.O.

WORLD HEALTH ORGANIZATION
INTERIM COMMISSION

C50 Fifth Avenue New York

CONTENTS

	Page
Foreword	1
THE MOVE TOWARDS A NEW HEALTH ORGANIZATION:	
First steps	3
Appointment of a Technical Preparatory Committee	4
Work of the Technical Preparatory Committee	5
International Health Conference	6
Appointment of the Interim Commission.	10
Acts signed by the Participants in the International Health Confer-	10
ence, held in New York	11
Constitution of the World Health Organization	11
Protocol concerning the Office International d'Hygiène Publique	11
Arrangement establishing an Interim Commission	
Arrangement establishing an Interim Commission	12
WORLD HEALTH ORGANIZATION:	
Title	13
Objective	13
Functions	14
International Protection against Communicable Diseases	14
Emergency Measures to assist Governments	15
Aid to Governments	15
Assistance to Trust Territories	16
Standardization of Biological and Pharmaceutical Products	16
Standardization of Diagnostic Procedures	16
Improved Standards of Medical Teaching	17
International Comparability of the Causes of Death and Disease	17
Standards of Food Products	18
Public Health Administrative Technique and Hospital Services.	19
Mental Health	19
Scientific Research	20
Statistics	20
Information	20
Conventions	20
Collaboration with Governmental Health Administrations	21
Co-operation between the World Health Organization and other	21
Organizations	21
Membership and Associate Membership.	22
	23
Organs	23
World Health Assembly	23 24
	24 25
Secretariat	
Budget	25
Voting	26
Regional Arrangements	26
Headquarters	27
Anner I - Constitution of the World Health Organization	29

CHRONICLE OF THE WORLD HEALTH ORGANIZATION

VOL. I, No. 1-2

1947

FOREWORD

It has long been recognized that the solution of certain problems in the field of health depends upon international action.

The repeated and painful efforts in the Nineteenth Century to solve some of these problems bore fruit in the creation, during the last fifty years, of a number of international health organizations—the Pan American Sanitary Bureau, the International Office of Public Health, the Health Organization of the League of Nations and the Health Division of UNRRA. All these bodies were limited in space, time or function and it became increasingly clear that the end of the second world war must see the creation of a single worldwide intergovernmental health organization, within the general framework of the United Nations, which would not only assume responsibility for the work of the earlier bodies but have an extended role necessitated by the new problems arising out of the war and the changed conditions of the post-war world.

In their respective spheres, the sound work which these older organizations accomplished has contributed not a little to the speed with which the new World Health Organization has been created, since their efforts have been recognized on all sides as necessary and effective.

Already the activities of the World Health Organization—at present represented by its Interim Commission—are various, wide-spread and complex. They affect not only governments and public health administrations but practitioners in many fields of medicine

and hence certain aspects of the lives of individual citizens. Conversely, the funds which pay for these activities come ultimately from the pockets of millions of taxpayers and it is proper that any who are interested should know on what this money is spent.

The objective of the Chronicle of the World Health Organization is therefore to put at the disposal of those concerned a readable summary of the activities of the Organization, including the views and recommendations of its governing body and of its expert committees, and thus to mark the stages in the attempt to implement, through international action, the declaration contained in the preamble to its Constitution, that "the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being".

THE MOVE TOWARDS A NEW HEALTH ORGANIZATION

While the second world war caused immeasurable ruin and undermined the health of tens of millions of human beings, it also brought immense progress in the fields of science and technology as applied to medicine and hygiene. At the end of hostilities it was therefore of urgent importance to entrust to a powerful and competent international body the task of applying modern remedies to this perilous situation. There could be no question of handing over such an enormous task to any one of the existing bodies; the live forces and fruitful traditions of all had, in the general interest, to be fused in a new institution.

FIRST STEPS

To the Brazilian Delegation must be given the credit of having insisted that the concept of "health" be included in the actual Charter of the United Nations. Its inclusion in this basic document represents an acknowledgment that social, economic and even political progress is conditional on improvement in the state of health of the people.

In 1945, the Delegations of Brazil and China submitted to the San Francisco Conference a joint proposal, which was adopted, that an International Health Conference be called as a matter of urgency.

At its first session in London on 15 February 1946, the Economic and Social Council instructed the Secretary-General of the United Nations ² to convene an International Health Conference not later than 20 June 1946.

¹ See United Nations Charter, Articles 57 and 62.

 $^{^2}$ Resolutions adopted on 15 February and 11 June 1946. U. N. documents E/9/Rev. 1 and E/59/Rev.1.

APPOINTMENT OF A TECHNICAL PREPARATORY COMMITTEE

An essential preliminary to a meeting of such importance was the preparation of a draft constitution to be used as a basis for discussion. The Economic and Social Council entrusted this work to a Technical Preparatory Committee ¹, consisting of the following:

Dr. Manuel Martinez Baez (Mexico)

Dr. GREGORIO BERMANN (Argentine)

Dr. Joseph Čančik (Czechoslovakia)

Dr. André Cavaillon (France)

Dr. Xavier Leclainche (Alternate)

Dr. G. B. CHISHOLM (Canada)

Dr. ALY TEWFIK CHOUCHA PACHA (Egypt)

Dr. WASFY OMAR (Alternate)

Dr. KARL EVANG (Norway)

Sir Wilson Jameson (United Kingdom)

Dr. MELVILLE MACKENZIE (Alternate)

Dr. MARTIN KACPRZAK (Poland)

Dr. Phokion Kopanaris (Greece)

M. JEAN RAZIS (Alternate)

Major C. Mani (India)

Dr. CHUNI LAL KATIAL (Alternate)

Surgeon-General THOMAS PARRAN (United States of America)

Dr. James A. Doull (Alternate)

Lr. RENÉ SAND (Belgium)

Dr. GERALDO H. DE PAULA SOUZA (Brazil)

Dr. Andrija Stampar (Yugoslavia)

Dr. SZEMING SZE (China)

Representatives of the four international health organizations took part in the work of the Committee in an advisory capacity:

Office International d'Hygiène Publique (Paris):

Dr. M. T. MORGAN,

Dr. Robert Pierret.

League of Nations Health Organization (Geneva):

Dr. JACQUES PARISOT,

Dr. Yves Biraud.

¹ The text of the Resolution adopted by the Economic and Social Council on 15 February 1946 on the establishment of a Technical Preparatory Committee will be found in U.N. document E/9, Rev. 1, February 1946.

United Nations Relief and Rehabilitation Administration (UNRRA):

- Dr. Andrew Topping,
- Dr. NEVILLE GOODMAN,
- Dr. MAURICE GAUD.

Pan American Sanitary Bureau (Washington, D.C.):

- Dr. HUGH CUMMING,
- Dr. Aristides A. Moll.

THE WORK OF THE TECHNICAL PREPARATORY COMMITTEE

The Technical Preparatory Committee held twenty-two meetings between 18 March and 5 April 1946 at the Palais d'Orsay, Paris.

At the first meeting, Dr. CAVAILLON was proposed as Chairman of the Committee, but declined this honour and suggested the name of Dr. Sand, who was unanimously elected. Dr. Martinez Baez, former Director of Public Health in Mexico, was unanimously elected Vice-Chairman of the Technical Preparatory Committee, and Dr. Chisholm Rapporteur.

Four preliminary draft constitutions, submitted respectively by Drs. Cavaillon and Leclainche, Sir Wilson Jameson, Dr. Parran and Dr. Stampar, were taken as a basis for discussion. The Committee laid down certain principles which not only took present possibilities into account, but would also enable the future organization to extend its sphere of action to problems which had never been tackled by the earlier bodies.

Certain points brought out by members of the Committee illustrate the new spirit which governed their deliberations:

- "There must be a fundamental change in the conception of the new Organization: it should be a single specialized agency with a high degree of independence."
- "Medical science is going through a period of fundamental change: new needs are coming to light, and it is for the Organization to meet these needs and even to anticipate them."
- "It is desirable that the Organization include as many Member States as possible, and that it aim at becoming universal."

This aim of universality was emphasized by the members of the Committee and explained in the following terms, highly characteristic of the period which began in 1945: "Biological warfare, like that of the atomic bomb, had become a fearful menace and, unless doctors realize their responsibilities and act immediately, humanity runs the risk of total annihilation. Such action cannot stop at international frontiers."

With these principles in mind, the Committee prepared a draft constitution and agenda for the International Health Conference. These documents are contained in a report, which also includes a summary of the events which led up to the meeting of the Preparatory Committee in Paris, an historical sketch on international co-operation in health matters, together with the resolutions adopted by this Committee. In presenting this report, the Technical Preparatory Committee placed in the hands of the members of the forthcoming Conference the destiny of the Organization which was to be founded.

During its session in May 1946, the Economic and Social Council not only invited Members of the United Nations to be represented at the Conference, but also, in conformity with the principle of universality enunciated at Paris, asked sixteen non-member States to send representatives to take part in the discussions of the Conference, without the right to vote.

INTERNATIONAL HEALTH CONFERENCE

This was the first Conference to be called by the United Nations. Its organization was entrusted to the Health Division of the United Nations, under Dr. Yves Biraud, who acted as Secretary to the Conference.

The fifty-one Members of the United Nations sent delegations, and observers attended from thirteen non-member States. The Allied Commissions in Germany, Japan and Korea also sent observers. Ten international organizations interested in public health took part on the same terms.

The Governments of the following States were represented at the Conference by delegates:

¹ Report of the Technical Preparatory Committee for the International Health Conference, *Journal of the Economic and Social Council*, First Year, No. 13, 22 May 1946 (document of the United Nations, New York).

Argentina Iran Australia Iraq Belgium Lebanon Bolivia Liberia Brazil Luxemburg Byelorussian Soviet Socialist Mexico Republic Netherlands Canada New Zealand Chile Nicaragua China Norway Colombia Panama Costa Rica Paraguay Cuba \mathbf{Peru} Czechoslovakia Poland

Denmark Republic of the Philippines

Dominican Republic Saudi Arabia Ecuador Syria Egypt Turkey

El Salvador Ukrainian Soviet Socialist Republic

Ethiopia Union of South Africa

France Union of Soviet Socialist Republics

Greece United Kingdom

Guatemala United States of America

Haiti Uruguay Honduras Venezuela India Yugoslavia

The Governments of the following States were represented by observers:

Albania Hungary Siam
Austria Iceland Sweden
Bulgaria Italy Switzerland
Eire Portugal Transjordan

Finland

The Governments of the following States were invited to send observers, but were not represented:

Afghanistan Roumania Yemen

The following international organizations were represented by observers:

Food and Agriculture Organization of the United Nations (FAO) International Labour Organization (ILO) League of Red Cross Societies Office International d'Hygiène Publique

Pan American Sanitary Bureau

Provisional International Civil Aviation Organization (PICAO)

The Rockefeller Foundation

United Nations Educational, Scientific and Cultural Organization (UNESCO)

United Nations Relief and Rehabilitation Administration (UNRRA) World Federation of Trade Unions.

The Conference opened in New York on 19 June and closed on 22 July 1946. President Truman sent a message of welcome to the inaugural meeting, emphasizing the importance of this historic event and pointing out the urgency of the tasks that awaited the Conference. He said: "Modern transportation has made it impossible for a nation to protect itself against the introduction of disease by quarantine. This makes it necessary to develop strong health services in every country, which must be co-ordinated through international action."

The Conference unanimously elected as its Chairman Dr. Thomas Parran, Surgeon-General of the Public Health Service at Washington. The following were elected Vice-Chairmen:

Dr. André Cavaillon (France)

Sir Wilson Jameson (United Kingdom)

Dr. Fedor G. Krotkov (Union of Soviet Socialist Republics)

Dr. James Kofoi Shen (China)

Dr. GERALDO H. DE PAULA SOUZA (Brazil)

The Conference met eighteen times in plenary session between 19 June and 22 July 1946, in New York. It was convened to consider, first, procedure by which the work of the former international or regional public health organizations could be taken over by the World Organization being created, and secondly, to draft the Constitution of this organization.

The States represented at the Conference decided to take steps to dissolve the Office International d'Hygiène Publique in Paris and to take over its functions immediately. ¹

As regards the League of Nations Health Organization, the Conference adopted a resolution requesting the Secretary-General

¹ See page 11; see also the Protocol concerning the Office International d'Hygiène Publique in the Final Acts of the International Health Conference, document E/155, United Nations, Lake Success, N. Y., October 1946, page 45.

of the United Nations to make the necessary arrangements for transferring its functions to the future Organization. 1

Although, since its creation in 1943, the United Nations Relief and Rehabilitation Administration (UNRRA) had displayed considerable activity in providing assistance to public health administrations, the New York Conference did not have to take over its functions juridically because of the temporary nature of that organization which should, indeed, have terminated its activities in December 1946.23

Finally, the possibilities of integrating the Pan American Sanitary Bureau with the World Health Organization were discussed The States represented at the Conference agreed to include in the Constitution itself an article under the terms of which the Pan American Sanitary Bureau is to be integrated with the World Health Organization "through common action based on mutual consent of the competent authorities expressed through: the organizations concerned."4

The greater part of the Conference's time was devoted to drafting the Constitution, the text of which is attached as Annex I. Although this work was considerably simplified by the preliminary draft prepared by the Paris Committee, which was taken as a basis for discussion, it nevertheless required long and arduous efforts. In fact, it meant drawing up a veritable charter of international collaboration in the field of health.

In order to cover the wide scope of its task, the Conference appointed five committees, consisting of all the Member States, which worked for a whole month, often simultaneously. A special

¹ The Conference adopted the following resolution:

[&]quot;The Conference notes with gratification the steps already taken by the Secretary-General of the United Nations to provide temporary machinery for carrying on the remaining activities of the League of Nations Health Organization, as recommended in Resolution V of the Technical Preparatory Committee on 5 April 1946, and requests the Secretary-General of the United Nations, in order to avoid duplication of functions, to make the necessary arrangements for transferring to the Interim Commission of the World Health Organization as soon as possible such functions of the League of Nations Health Organization as have been assumed by the United Nations.

² The activities of UNRRA were nevertheless continued beyond that date.

³ An agreement was subsequently reached between the World Health Organization and UNRRA for the continuation of the health work undertaken by the latter, including that in Greece, Italy, Ethiopia and China.

⁴ See Article 54 of the Constitution.

committee was appointed for scope and functions, one for administration and finance, one for legal questions, one for relationships with the United Nations and other organizations, and one for regional arrangements.

The various parts of the constitution thus distributed were discussed point by point. The resulting draft was submitted to the plenary meeting of the Conference for final discussion. It was approved in general outline, though several changes of detail were made.

One of the fundamental questions with which the plenary meeting of the Conference had to deal was the admission to the organization of States not members of the United Nations. The Paris Committee had stated that membership should be open to all States. The Conference stipulated that non-member States invited to New York might become Members of the Organization by signing or otherwise accepting the Constitution before the first session of the World Health Assembly, whereas States not invited to New York might be admitted only by decision of the World Health Assembly.

APPOINTMENT OF THE INTERIM COMMISSION

The New York Conference decided that, until the entry into force of the Constitution of the World Health Organization, an Interim Commission consisting of eighteen States should assume the responsibilities and tasks which would devolve on the future Organization, namely: (a) preparatory work and establishment of the Organization; (b) continuation of the functions of former international organizations; (c) and if necessary, the solution of urgent health problems.

The eighteen States entitled to designate persons to serve on the Interim Commission are the following:

AustraliaNetherlandsBrazilNorwayCanadaPeru

China Ukrainian Soviet Socialist Republic Egypt Union of Soviet Socialist Republics

France United Kingdom

India United States of America

Liberia Venezuela Mexico Yugoslavia ACTS SIGNED BY THE PARTICIPANTS IN THE INTERNATIONAL HEALTH CONFERENCE, HELD IN NEW YORK

The work of the New York International Health Conference was concluded by the signature of four Acts designed to give legal force to the decisions taken for the establishment of the World Health Organization. Excluding the Final Act of the Conference, which gives a summary of the work leading to the creation of the Organization, these are as follows:

Constitution of the World Health Organization.

:

This Act is the "Magna Carta" of health. In its final form it constitutes one of the most powerful instruments for international collaboration to enable man to improve his conditions of life. It will come into force when twenty-six Members of the United Nations have signed it without reservation, or ratified it. Alterations may be made subsequently. States submitting proposals to this effect must do so in the form of amendments which shall be communicated by the Director-General to Members of the WHO at least six months in advance of their consideration by the World Health Assembly. Amendments shall come into force for all Members when adopted by a two-thirds vote of the Health Assembly and accepted by two-thirds of the Members, in accordance with their respective constitutional processes.

Any question or dispute concerning the interpretation of the Constitution in its present form shall be referred by the parties to the International Court of Justice, which shall also have authority to give advisory opinions on any legal question that concerns the Organization.

The Constitution was signed in New York by the representatives of sixty-one States. China and the United Kingdom signed without reservation.

Protocol concerning the Office International d'Hygiène Publique.

The Office International d'Hygiène Publique in Paris was established by the International Agreement of 1907, which provided for its renewal every seven years. Any State wishing to withdraw from the Office was required to give prior notice of its intention at

least a year before the expiry of a seven-year period. This means that legally the Office cannot be terminated before the end of 1949, when the current seven-year period comes to an end, except by the agreement of all Member States.

Those Member States that took part in the New York Conference, being convinced of the need for a single organization in the field of health, agreed that, although the Office International d'Hygiène Publique must continue de jure until 1949, its functions should be assumed by the World Health Organization as soon as the protocol to this effect came into force, that is, as soon as it had been accepted by twenty Governments parties to the Agreement of 1907.

Arrangement establishing an Interim Commission.

The composition of the Interim Commission and its principal duties have been outlined above. Its establishment was the result of an Arrangement concluded by the Governments represented at the International Health Conference. This was signed on 22 July 1946, and defined the nature and scope of the Commission's functions. Its first duty was to prepare for the World Health Assembly. Its expenses were met from funds advanced by the United Nations. The Executive Secretary is responsible for the preparation of budget estimates both for the period from the establishment of the Interim Commission until 31 December 1946, and for subsequent periods as necessary.

The Interim Commission, which has to submit a report on its activities to the World Health Assembly, will cease to exist in virtue of a resolution of this Assembly at its first session. Its property and records, and such of its staff as may be required will then be transferred to the Organization.

WORLD HEALTH ORGANIZATION

TITLE

The World Health Organization is the first inter-governmental institution to adopt the term "world" as part of its title. Although several delegations wished to mark the relationship between the United Nations and the new organization, the New York Conference finally decided to adopt the present title. It wished to stress the fact, which is becoming increasingly obvious, that problems which are no longer purely national must of necessity be solved not by international action merely, but by world-wide action. Disease knows no frontiers and anything less than world action may not only deprive one nation of the benefits of the Organization, but may endanger the health of all Member States.

OBJECTIVE

The objective of the World Health Organization shall be the attainment by all peoples of the highest possible level of health (Article 1).

If the vast scope of this Article and all it involves are to be understood, the new definition given by the representatives of the sixty-one States which met in New York in 1946 must be borne in mind: "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."

The indispensable conditions for the achievement of this objective by the World Health Organization are formally laid down in the Preamble to the Constitution. Among the principles it enunciates, two in particular emphasize the importance of international cooperation in the field of health:

"The health of all peoples is fundamental to the attainment of peace and security and is dependent upon the fullest cooperation of individuals and States.

¹ See Annex I.

"Unequal development in different countries in the promotion of health and control of disease, especially communicable disease, is a common danger."

FUNCTIONS

Although it does not regard the part played by other international bodies in the fight for world health as by any means negligible, its Constitution makes the World Health Organization the supreme directing and co-ordinating body in the sphere of public health. Since its aim is to reduce the incidence of disease and death throughout the world, its functions are necessarily manifold.

International Protection against Communicable Diseases.

Between the International Health Conference of 1851 held at Paris and that of 1892 in Venice, several international conferences had tried in vain to convince governments of the urgent need for bringing into operation the proposed sanitary Conventions which remained a dead letter for lack of ratification, while epidemics were being left to rage unchecked. It needed the outbreak of a cholera epidemic in Venice, at the very time when the International Conference of 1892 was in session, to persuade governments to modify their attitude on this point. During the last half-century, a series of international conventions (1903, 1912, 1926, 1933 and 1938) have perfected the application of quarantine regulations for the five "pestilential" diseases (cholera, plague, yellow fever, typhus and smallpox). The Washington conventions (UNRRA) of 1944 included among pestilential diseases the other communicable diseases likely at some particular time to constitute a threat to other countries. The rapid development of means of transport, and especially the widespread use of aircraft, make the preparation of new health laws indispensable. While application of the international conventions should reduce the danger of epidemics spreading from one country to another, the ultimate aim of the organization must clearly be to wipe out the foci of these epidemics.

The Executive Board of the WHO will be charged with the duty of nominating the experts to carry out this work. The World Health Assembly will have authority to adopt regulations concerning "sanitary and quarantine requirements and other procedures designed to prevent the international spread of disease" (Art. 21, para. (a), of the Constitution). It will not be necessary to convene a special diplomatic conference whose proceedings would involve the setting up of the slow and complicated machinery required for the ratification of a convention.

Emergency Measures to assist Governments.

The World Health Organization is to "furnish appropriate technical assistance and, in emergencies, necessary aid upon the request or acceptance of governments" (Art. 2, para. (d)). The Executive Board has the power "within the functions and financial resources of the Organization . . . to take emergency measures to deal with events requiring immediate action. In particular it may authorize the Director-General to take the necessary steps to combat epidemics, to participate in the organization of health relief to victims of a calamity and to undertake studies and research the urgency of which has been drawn to the attention of the Board by any Member or by the Director-General" (Art. 28, para. (i), of the Constitution). "A special fund to be used at the discretion of the Board shall be established to meet emergencies and unforeseen contingencies" (Art. 58).

Aid to Governments.

Since curative medicine as applied by individual medical practitioners has proved incapable of successfully combating epidemic and social diseases, countries have been obliged to set up health administrations for the application of collective and preventive medicine. These administrations have benefited in the past, in varying degrees, from the assistance and technical advice of various international health organizations, such as the League of Nations Health Organization, the Pan American Sanitary Bureau, the Rockefeller Foundation, U.N.R.R.A., and many more. Far from wishing to monopolize this field, in which there can never be too many helpers, the World Health Organization proposes "to assist governments, upon request, in strengthening health services" (Art. 2, para. (c)). As stated above, it will also furnish appropriate technical assistance in emergencies, again upon the request or acceptance of governments (Art. 2, para. (d)).

Assistance to Trust Territories.

The World Health Organization is called upon to provide, at the request of the United Nations, health services and facilities to special groups, such as the peoples of trust territories (Art. 2, para. (e)).

Standardization of Biological and Pharmaceutical Products.

The importance of using substances of a known specific potency has been recognized for a long time past. Before the war, a Commission of the League of Nations Health Organization had standardized thirty-five substances, the titration of which can only be effected by biological methods, the technical work having been carried out by the Copenhagen and Hampstead Institutes. Even during the war, in spite of immense difficulties, research was not interrupted: heparine, vitamin E and penicillin were standardized. However, urgent problems arose at the end of the war. Streptomycin, indispensable in modern therapy, should be standardized, and the unification of methods for the titration of vaccines and especially of anatoxins is likewise desirable. The World Health Organization, continuing in the sphere of biological standardization the activities of the League of Nations Health Organization, is to take over this task.

Article 21 of the Constitution provides that the World Health Assembly shall have the authority to prepare and approve "standards with respect to the safety, purity and potency of biological, pharmaceutical and similar products moving in international commerce."

Standardization of Diagnostic Procedures.

The variety of methods of diagnosis now in use in different countries makes it difficult for doctors to assess the findings in other countries. While no one wishes to reduce medicine to a number of standard formulæ and to eliminate all the other procedures used, some of which might eventually prove more satisfactory than those adopted to-day, it is nevertheless desirable that standards of comparison should be adopted in order to ensure, if not uniformity, at all events a degree of comparability. A case in point is the sero-logical diagnosis of syphilis. The problem is not only to decide on the methods to be employed internationally in the case of some

particular disease, but also to choose between the many existing variations of individual diagnostic procedures. Under its Constitution, the World Health Organization will be empowered "to standardize diagnostic procedures as necessary" (Art. 2, para. (t)). The World Health Assembly will have authority to adopt the relevant regulations submitted to it by the Executive Board (Art. 21, para. (c)).

Improved Standards of Medical Teaching.

Instruction in public health is neglected in a great number of universities and countries. In many medical faculties, hygiene of the old school, which pays more attention to the principles of sanitation than to the whole technique of reducing the incidence of death and disease, is taught in preference to the relatively modern science of public health. As a result, many doctors, while they have a more or less perfect understanding of the individual doctor's part in fighting disease, have only a very vague idea of the comprehensive techniques proper to public health. Medical teaching should therefore, in future, be imbued with the concept of preventive and collective medicine.

In many countries there are still no schools of medicine. In such countries the problem of training medical staff needs to be tackled otherwise than in more advanced countries. Even in the latter, technical progress and the conditions of modern life and medical practice necessitate the constant bringing up to date of facts and teaching methods.

It is clear that this is a long-term undertaking which can, of course, be carried out only with the complete agreement of the parties concerned. This task also falls within the scope of the World Health Organization, which is required by its Constitution "to promote improved standards of teaching and training in the health, medical and related professions" (Art. 2, para. (o)).

International Comparability of the Causes of Death and Disease.

Following on the work of the Committee of Experts, which met at Paris in 1900, most States adopted the Bertillon classification for their statistics of causes of death. The Convention then signed stipulated that the list should be revised every ten years by International Conferences. A similar list of the causes of morbidity, without which research and clinical workers would be unable to use international statistics, remained to be drawn up. Indeed, without a list of this kind, it would be impossible to organize medical and demographic statistics on an international scale.

The Conference for the Fifth Revision of the List of Causes of Death instructed the League of Nations Health Organization and the International Statistical Institute at The Hague to collaborate in the preparatory work of drawing up a list of the causes of disease. The work begun by these bodies was interrupted by the war.

In 1945, a committee to revise the list of joint causes of death ¹ met in the United States. Recognizing the general trend of opinion on statistical lists relating to morbidity and mortality, the Committee decided that, before taking up the matter of joint causes, it would be advantageous to consider classification from the point of view of morbidity and mortality since the joint cause problem pertains to both types of statistics.

A nomenclature applicable to mortality and morbidity statistics was drafted and immediately tried out in practice ².

At the beginning of 1947, this work was continued by the World Health Organization, whose task it now is to "establish and revise as necessary international nomenclatures of diseases, of causes of death and of public health practices" (Art. 2, para. (s)). The draft regulations will be submitted to the World Health Assembly for approval (Art. 21, para. (b)).

Standards of Food Products.

In the absence of adequate nutrition, all medical action is doomed to failure. This important question could not therefore be neglected by the World Health Organization, in this matter the successor of the League of Nations Health Organization, which had devoted its attention to the subject. It is therefore one of the functions of the Organization "to promote, in co-operation with other specialized agencies where necessary, the improvement of nutrition" (Art. 2,

¹ The exact name of the Committee is: United States Committee on Joint Causes of Death.

² The nomenclature is entitled: "Proposed Statistical Classification of Diseases, Injuries and Causes of Death."

para. (i)). Another of its duties will be to "develop, establish and promote international standards with respect to food (Art. 2, para. (u)).

Public Health Administrative Technique and Hospital Services.

The practice of curative medicine varies considerably from one country to another, from the classical tradition of individual relations between doctor and patient to State medicine, passing through all the gradations of free or compulsory health insurance. An objective study of the systems in force and their results would be of great value.

In the field of preventive medicine and health administration, the methods adopted vary most widely and a study of those that have been thoroughly tested abroad would be of great assistance to health administrations. The World Health Organization will undertake this work of study and publication, pending discussion by experts. In accordance with its Constitution, the field of study will cover all branches of public health—that is, the organization of medical care from preventive and curative points of view, hospital services and health insurance services, etc. (Art. 2, para. (p)).

Mental Health.

The inclusion of mental health among the problems to be dealt with by the World Health Organization is an innovation, so far as the earlier organizations are concerned. Certain improvements in this field are essential. Without them, indeed, physically and mentally healthy man, the ultimate objective of the Organization, will never become a reality. Mental health is a science that is still too much neglected: this is shown in the unsatisfactory conditions in which man has to develop—conditions which could be improved. Haphazard urbanization, unsatisfactory working conditions, the noise of great cities, overwork, the fact that recreation is still considered a luxury and not an essential need—these are just a few of the many causes of the psychic instability of modern man.

The New York Conference recognized the importance of mental health when, in its Constitution, it instructed the Organization to "foster activities in the field of mental health, especially those affecting the harmony of human relations" (Art. 2, para. (m)).

Scientific Research.

The League of Nations Health Organization obtained extremely satisfactory results in the international co-ordination of research. This was mainly concerned with the diagnosis, treatment and prevention of contagious diseases. The wider field of the World Health Organization will allow the application of these methods of concerted research to other diseases and other health factors. The World Health Organization is instructed to "promote and conduct research in the field of health by the personnel of the Organization, by the establishment of its own institutions, or by co-operation with official or non-official institutions of any Member with the consent of its Government" (Art. 18, para. (k), and Art. 2, para. (n)).

Statistics.

The World Health Organization is authorized by the Constitution to establish and maintain such statistical and administrative services as may be required (Art. 2, para. (f)). Each Member must communicate promptly to the Organization any important statistics pertaining to health which it may publish (Art. 63 and 64).

Information.

National Health Administrations often require information as to the method of solving a technical problem, or the most appropriate legislation or regulations to meet a particular situation. It is always difficult for Health Administrations to obtain necessary information by applying to a large number of other administrations. By centralizing such information and documentation, or by approaching suitable experts, the Secretariat of the World Health Organization will often be able to give valuable assistance to Administrations applying for it, and furnish them with "information, counsel and assistance in the field of health" (Art. 2, para. (q)).

Conventions.

"The Health Assembly shall have authority to adopt conventions or agreements with respect to any matter within the competence of the Organization. A two-thirds vote of the Health Assembly shall be required for the adoption of such conventions or agree-

ments which shall come into force for each Member when accepted by it in accordance with its constitutional processes" (Art. 19). It is also provided that within eighteen months after the adoption by the Health Assembly of a convention or agreement each Member shall take the necessary action and notify the Director-General thereof. If it does not accept such convention or agreement within the time-limit, it will be obliged to furnish a statement to this effect, giving reasons for non-acceptance (Art. 20).

Collaboration with Governmental Health Administrations.

Under the terms of Art. 2, para. (b), of the Constitution, it is the duty of the Organization "to establish and maintain effective collaboration with the United Nations, specialized agencies, governmental health administrations, professional groups and such other organizations as may be deemed appropriate."

Moreover, in order to facilitate this collaboration, the Director-General is authorized to have direct access to the various national Departments, notably to their Health Administrations and to national health organizations, governmental or non-governmental. The same applies to his relations with international bodies whose activities are in the same field as those of the Organization. The Director-General is also responsible for keeping regional offices informed on all matters involving their respective areas (Art. 33).

Co-operation between the World Health Organization and Other Organizations.

It is clear that the World Health Organization cannot reach the goal it has set itself without securing the co-operation of all the other organizations working for similar objectives. Provision has therefore been made (Art. 70) for the establishment of close relations and effective co-operation between the World Health Organization and inter-governmental organizations dealing with particular aspects of hygiene or public health, as for instance with the Food and Agriculture Organization in connection with nutrition and rural health problems, with the International Labour Organization in connection with industrial hygiene and health insurance, with the International Civil Aviation Organization for questions relating to air quarantine requirements, and with UNESCO for a number of scientific and educational questions, etc.

The Constitution provides for active collaboration with non-governmental as well as inter-governmental and governmental organizations. Agreements bringing the World Health Organization into relation with inter-governmental organizations are to be approved by a two-thirds majority of the World Health Assembly (Art. 60, para. (a)).

The World Health Organization is also to co-operate on a regional basis with the regional organs of the United Nations and other specialized agencies and with other regional international organizations with which it has interests in common (Art. 50, para. (d)). The World Health Organization may invite any organization, international or national, governmental or non-governmental, which has responsibilities related to those of the Organization, to appoint representatives to participate, without right of vote, in its meetings or in those of the committees and conferences convened under its authority, on conditions prescribed by the Health Assembly; but in the case of national organizations, invitations shall be issued only with the consent of the government concerned "(Art. 18, para. (h)).

MEMBERSHIP AND ASSOCIATE MEMBERSHIP

Members of the United Nations may become Members of the World Organization by signing or accepting the Constitution. The non-Member States invited to the International Health Conference in New York may also become Members by signing or accepting the Constitution (Art. 4 and 5), provided that such signature or acceptance is completed before the first session of the Health Assembly. States may become parties to the Constitution by (Art. 79, para. (a)):

- (i) Signature without reservation;
- (ii) Signature subject to approval followed by acceptance; or
- (iii) Acceptance.

States not fulfilling the conditions laid down in Articles 4 and 5 may be admitted to the World Health Organization upon request, provided their application is approved by a simple majority vote of the Health Assembly (Art. 6).

Territories which are not responsible for the conduct of their international relations may be admitted as "Associate Members"; their application for admission must be made by the Member or authority having responsibility for their international relations. Article 8 stipulates that the representatives of such territories

should be qualified by their technical competence and chosen from the native population. The nature and extent of the rights and obligations of such territories are not defined in the Constitution but will be determined at a later date by the World Health Assembly.

ORGANS

The work of the World Health Organization will be carried out by three organs:

- (a) The World Health Assembly, to which all Member States will send delegates and which will have authority to take final decisions;
- (b) The Executive Board, consisting of the representatives of 18 Member States, elected for a period of three years; and
- (c) A permanent Secretariat under a Director-General.

The World Health Assembly. 1

Each Member will be represented in the Assembly, to which it may send not more than three delegates. The latter may, however, be accompanied by alternates and advisers. The Assembly will meet in regular annual session. Special sessions may be convened at the request of the Executive Board or of a majority of the Members. The region or country in which each session of the Assembly is to be held will be chosen by the Assembly itself. The place and date of the meeting will be determined by the Board, in consultation with the Secretariat.

The World Health Assembly is the supreme authority in matters of public health. It will determine the health policies of the Organization—that is to say, it will decide which problems are to be dealt with by the Organization and how they are to be tackled. It will have authority to take any appropriate action to further the objective of the Organization.

In carrying out these functions, the Assembly will have to take into consideration any recommendations made by the General Assembly, the Economic and Social Council, the Security Council, or Trusteeship Council of the United Nations. It will also have to take decisions on any recommendations or proposals submitted by Member States. Between sessions, its powers are to be delegated

¹ Articles 10 to 23 of the Constitution.

to the Executive Board. The latter must, however, submit a report on its work to the Assembly for approval.

The World Health Assembly will elect the Member States entitled to designate persons to serve on the Executive Board. The Assembly will also appoint the Director-General.

The financial policy of the Organization will also be controlled by the Assembly, which will have power to review and approve the annual budget.

The Assembly may establish such committees or institutions as may be considered necessary to facilitate the work of the Organization. It may invite any organization, international or national, governmental or non-governmental, to send representatives to participate in its meetings as observers.

The Assembly will submit an annual report on its work to the Economic and Social Council.

The adoption of conventions or agreements constitutes one of the most important functions of the Assembly. It has authority to adopt regulations concerning: (a) sanitary and quarantine requirements and other procedures designed to prevent the international spread of disease; (b) nomenclatures with respect to diseases, causes of death and public health practices; (e) standards with respect to statistical procedures for international use; (d) standards with respect to the safety, purity and potency of biological, pharmaceutical and similar products moving in international commerce; (e) advertising and labelling of biological, pharmaceutical and similar products.

The Executive Board. 1

The eighteen persons who are to serve on the Executive Board will be designated by the eighteen States elected to do so by the World Health Assembly, which should take into account equitable geographical distribution. The persons designated may be accompanied by alternates and advisers. Members will be elected for three years and will be eligible for re-election. To preserve the continuity of the Board's work and ensure the admission of six new members each year, it is, however, laid down that, of the eighteen members elected at the first session of the Assembly, the terms of six members shall be for one year, those of a further six members

¹ Articles 24 to 29 of the Constitution.

for two years, while the remaining six members shall serve for one full term. This initial selection, the only one of its kind, will be made by drawing lots.

The Executive Board will meet at least twice a year and, at each session, will determine the place of its next meeting. Its function will be to act as the executive organ of the World Health Assembly; it will therefore be called upon to give effect to the decisions taken by the Assembly. It has also the very important function of submitting to the Assembly a general programme of work. It may also submit advice or proposals to the Assembly, either on its own initiative or when requested to do so. Finally, it may in emergencies, as, for instance, in the case of a threatened epidemic, authorize the Director-General to take the necessary action.

The members of the Executive Board, who are to be technically qualified in the field of health, will represent the common interests of all the Members of the World Health Organization and not their own Governments.

Secretariat. 1

The Secretariat will comprise the Director-General and such technical and administrative staff as may be required. The Director-General is ex officio Secretary-General of the World Health Assembly, of the Executive Board, of all commissions and committees of the Organization and of all conferences convened by it. He may delegate these functions.

The Constitution recognizes the desirability of recruiting the Secretariat on as wide a geographical basis as possible.

The Director-General will prepare and submit annually to the Executive Board the financial statements and budget estimates of the Organization. He is authorised to establish direct relations with the various government departments and especially with national health organizations, governmental or non-governmental.

BUDGET 2

After the International Conference in New York, the Economic and Social Council submitted to the United Nations Assembly

¹ Articles 30-37 of the Constitution.

² Articles 55-58 of the Constitution.

a resolution ¹ approving the establishment of a World Health Organization. When the resolution was discussed on 26 November 1946, the representative of the Ukrainian Soviet Socialist Republic, Dr. Levko I. Medved, expressed the opinion that the World Health Organization should be financed not by the United Nations but solely by those Governments that were Members of the Organization. His proposal was seconded on behalf of the United States by Mrs. Eleanor Roosevelt and by Mr. Watt, speaking for Australia, and this method of financing the Organization was unanimously approved ².

The budgetary resources of the Organization will be drawn from the contributions of governments, assessed in accordance with a scale to be fixed by the World Health Assembly, and any gifts and bequests that may be accepted by the Assembly or the Executive Board. The Director-General will be responsible for preparing the annual budget estimates and submitting them to the Executive Board. The latter will then refer them to the Assembly for approval together with any recommendations it may deem advisable.

VOTING 3

Each Member State will have one vote in the World Health Assembly. The right to vote of any Member not fulfilling its financial obligations may be suspended by the Assembly for such period as it deems advisable. In the Assembly, the Board or any committees of the Organization, a two-thirds majority is required for decisions on such questions as the adoption of conventions or agreements, the approval of agreements bringing the Organization into relation with the United Nations and inter-governmental organizations and agencies and any amendments to the Constitution. Decisions on other questions may be taken by a simple majority.

REGIONAL ARRANGEMENTS 4

To meet world health requirements with due regard for regional differences, the World Health Assembly is authorized to define,

¹ Document E/130, Rev. 2.

² United Nations Journal, No. 44, 28 November 1946, pages 150-153.

³ Articles 59 and 60 of the Constitution.

⁴ Articles 44-55 of the Constitution.

when it deems it necessary, the geographical areas in which problems of a purely local character could be settled by regional organizations. Each regional organization will be an integral part of the World Health Organization and may be established by the Assembly with the consent of a majority of the Members within the region concerned. There will be not more than one regional organization in each area. Each regional organization will consist of a Regional Committee and a Regional Office. The committees will be composed of the representatives of Member States and Associate Members 1 in the region concerned. Territories which are not responsible for the conduct of their international relations and which are not Associate Members will, however, have the right to be represented and to participate in Regional Committees. The rights and obligations of Regional Committees will be determined by the Health Assembly. They will meet as often as necessary and determine the place of each meeting, adopting their own rules of procedure.

The functions of the Regional Committees will be to consider all health problems of an exclusively local character, referring them to the Regional Office, or bringing certain regional problems to the attention of the World Health Assembly. They will keep the Assembly informed of regional needs, of the achievements of the Regional Office and of its future requirements. They may obtain additional financial appropriations from the Governments of the regions concerned.

The Regional Office will be the administrative organ of the Regional Committee. It will be placed under the authority of a Regional Director appointed by the Executive Board in agreement with the Regional Committee. The staff will be appointed in a manner to be determined by agreement between the Director-General and the Regional Director.

HEADQUARTERS

The location of the permanent headquarters of the Organization will be determined by the World Health Assembly after consultation with the United Nations.

¹ Territories not responsible for the conduct of their international relations and accepted by the World Health Assembly.



Annex 1.

CONSTITUTION OF THE WORLD HEALTH ORGANIZATION

THE STATES parties to this Constitution declare, in conformity with the Charter of the United Nations, that the following principles are basic to the happiness, harmonious relations and security of all peoples:

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.

The health of all peoples is fundamental to the attainment of peace and security and is dependent upon the fullest co-operation of individuals and States.

The achievement of any State in the promotion and protection of health is of value to all.

Unequal development in different countries in the promotion of health and control of disease, especially communicable disease, is a common danger.

Healthy development of the child is of basic importance; the ability to live harmoniously in a changing total environment is essential to such development.

The extension to all peoples of the benefits of medical, psychological and related knowledge is essential to the fullest attainment of health.

Informed opinion and active co-operation on the part of the public are of the utmost importance in the improvement of the health of the people.

Governments have a responsibility for the health of their peoples which can be fulfilled only by the provision of adequate health and social measures.

ACCEPTING THESE PRINCIPLES, and for the purpose of co-operation among themselves and with others to promote and protect the health of all peoples, the Contracting Parties agree to the present Constitution and hereby establish the World Health Organization as a specialized agency within the terms of Article 57 of the Charter of the United Nations.

CHAPTER I - OBJECTIVE

Article 1.

The objective of the World Health Organization (hereinafter called the Organization) shall be the attainment by all peoples of the highest possible level of health.

CHAPTER II — FUNCTIONS

Article 2.

In order to achieve its objective, the functions of the Organization shall be:
(a) to act as the directing and co-ordinating authority on international health work:

- (b) to establish and maintain effective collaboration with the United Nations, specialized agencies, governmental health administrations, professional groups and such other organizations as may be deemed appropriate;
- (c) to assist Governments, upon request, in strengthening health services;
- (d) to furnish appropriate technical assistance and, in emergencies, necessary aid upon the request or acceptance of governments;
- (e) to provide or assist in providing, upon the request of the United Nations, health services and facilities to special groups, such as the peoples of trust territories;
- (f) to establish and maintain such administrative and technical services as may be required, including epidemiological and statistical services;
- (g) to stimulate and advance work to eradicate epidemic, endemic and other diseases;
- (h) to promote, in co-operation with other specialized agencies where necessary, the prevention of accidental injuries;
- (i) to promote, in co-operation with other specialized agencies where necessary, the improvement of nutrition, housing, sanitation, recreation, economic or working conditions and other aspects of environmental hygiene;
- (j) to promote co-operation among scientific and professional groups which contribute to the advancement of health;
- (k) to propose conventions, agreements and regulations, and make recommendations with respect to international health matters and to perform such duties as may be assigned thereby to the Organization and are consistent with its objective;
- (1) to promote maternal and child health and welfare and to foster the ability to live harmoniously in a changing total environment;
- (m) to foster activities in the field of mental health, especially those affecting the harmony of human relations;
- (n) to promote and conduct research in the field of health;
- (0) to promote improved standards of teaching and training in the health, medical and related professions;
- (p) to study and report on, in co-operation with other specialized agencies where necessary, administrative and social techniques affecting public health and medical care from preventive and curative points of view, including hospital services and social security;
- (q) to provide information, counsel and assistance in the field of health;
- (r) to assist in developing an informed public opinion among all peoples on matters of health;
- (s) to establish and revise as necessary international nomenclatures of diseases, of causes of death and of public health practices;
- (t) to standardize diagnostic procedures as necessary;
- (u) to develop, establish and promote international standards with respect to food, biological, pharmaceutical and similar products;
- (v) generally to take all necessary action to attain the objective of the Organization.

CHAPTER III — MEMBERSHIP AND ASSOCIATE MEMBERSHIP

Article 3.

Membership in the Organization shall be open to all States.

Article 4.

Members of the United Nations may become Members of the Organization by signing or otherwise accepting this Constitution in accordance with the provisions of Chapter XIX and in accordance with their constitutional processes.

Article 5.

The States whose Governments have been invited to send observers to the International Health Conference held in New York, 1946, may become Members by signing or otherwise accepting this Constitution in accordance with the provisions of Chapter XIX and in accordance with their constitutional processes provided that such signature or acceptance shall be completed before the first session of the Health Assembly.

Article 6.

Subject to the conditions of any agreement between the United Nations and the Organization, approved pursuant to Chapter XVI, States which do not become Members in accordance with Articles 4 and 5 may apply to become Members and shall be admitted as Members when their application has been approved by a simple majority vote of the Health Assembly.

Article 7.

If a Member fails to meet its financial obligations to the Organization or in other exceptional circumstances the Health Assembly may, on such conditions as it thinks proper, suspend the voting privileges and services to which a Member is entitled. The Health Assembly shall have the authority to restore such voting privileges and services.

Article 8.

Territories or groups of territories which are not responsible for the conduct of their international relations may be admitted as Associate Members by the Health Assembly upon application made on behalf of such territory or group of territories by the Member or other authority having responsibility for their international relations. Representatives of Associate Members to the Health Assembly should be qualified by their technical competence in the field of health and should be chosen from the native population. The nature and extent of the rights and obligations of Associate Members shall be determined by the Health Assembly.

CHAPTER IV - ORGANS

Article 9.

The work of the Organization shall be carried out by:

- (a) The World Health Assembly (herein called the Health Assembly);
- (b) The Executive Board (hereinafter called the Board);
- (c) The Secretariat.

CHAPTER V — THE WORLD HEALTH ASSEMBLY

Article 10.

The Health Assembly shall be composed of delegates representing Members.

Article 11.

Each Member shall be represented by not more than three delegates, one of whom shall be designated by the Member as chief delegate. These delegates should be chosen from among persons most qualified by their technical competence in the field of health, preferably representing the national health administration of the Member.

Article 12.

Alternates and advisers may accompany delegates.

Article 13.

The Health Assembly shall meet in regular annual session and in such special sessions as may be necessary. Special sessions shall be convened at the request of the Board or of a majority of the Members.

Article 14.

The Health Assembly, at each annual session, shall select the country or region in which the next annual session shall be held, the Board subsequently fixing the place. The Board shall determine the place where a special session shall be held.

Article 15.

The Board, after consultation with the Secretary-General of the United Nations, shall determine the date of each annual and special session.

Article 16.

The Health Assembly shall elect its President and other officers at the beginning of each annual session. They shall hold office until their successors are elected.

Article 17.

The Health Assembly shall adopt its own rules of procedure.

Article 18.

The functions of the Health Assembly shall be:

- (a) to determine the policies of the Organization;
- (b) to name the Members entitled to designate a person to serve on the Board;
- (c) to appoint the Director-General;
- (d) to review and approve reports and activities of the Board and of the Director-General and to instruct the Board in regard to matters upon which action, study, investigation or report may be considered desirable;
- (e) to establish such committees as may be considered necessary for the work of the Organization;
- (f) to supervise the financial policies of the Organization and to review and approve the budget;
- (g) to instruct the Board and the Director-General to bring to the attention of Members and of international organizations, governmental or nongovernmental, any matter with regard to health which the Health Assembly may consider appropriate;
- (h) to invite any organization, international or national, governmental or non-governmental, which has responsibilities related to those of the Organization, to appoint representatives to participate, without right of vote, in its meetings or in those of the committees and conferences convened under its authority, on conditions prescribed by the Health Assembly; but in the case of national organizations, invitations shall be issued only with the consent of the Government concerned;
- (i) to consider recommendations bearing on health made by the General Assembly, the Economic and Social Council, the Security Council or Trusteeship Council of the United Nations, and to report to them on the steps taken by the Organization to give effect to such recommendations;
- (j) to report to the Economic and Social Council in accordance with any agreement between the Organization and the United Nations;
- (k) to promote and conduct research in the field of health by the personnel of the Organization, by the establishment of its own institutions or by co-operation with official or non-official institutions of any Member with the consent of its Government;
- (1) to establish such other institutions as it may consider desirable;
- (m) to take any other appropriate action to further the objective of the Organization.

Article 19.

The Health Assembly shall have authority to adopt conventions or agreements with respect to any matter within the competence of the Organization. A two-thirds vote of the Health Assembly shall be required for the adoption of such conventions or agreements which shall come into force for each Member when accepted by it in accordance with its constitutional processes.

Article 20.

Each Member undertakes that it will, within eighteen months after the adoption by the Health Assembly of a convention or agreement, take action relative to the acceptance of such convention or agreement. Each Member shall notify the Director-General of the action taken and if it does not accept such convention or agreement within the time limit, it will furnish a statement of the reasons for non-acceptance. In case of acceptance, each Member agrees to make an annual report to the Director-General in accordance with Chapter XIV.

Article 21.

The Health Assembly shall have authority to adopt regulations concerning:

- (a) sanitary and quarantine requirements and other procedures designed to prevent the international spread of disease;
- (b) nomenclatures with respect to diseases, causes of death and public health practices;
- (c) standards with respect to diagnostic procedures for international use;
- (d) standards with respect to the safety, purity and potency of biological, pharmaceutical and similar products moving in international commerce;
- (e) advertising and labelling of biological, pharmaceutical and similar products moving in international commerce.

Article 22.

Regulations adopted pursuant to Article 21 shall come into force for all Members after due notice has been given of their adoption by the Health Assembly except for such Members as may notify the Director-General of rejection or reservations within the period stated in the notice.

Article 23.

The Health Assembly shall have authority to make recommendations to Members with respect to any matter within the competence of the Organization.

CHAPTER VI — THE EXECUTIVE BOARD

Article 24.

The Board shall consist of eighteen persons designated by as many Members. The Health Assembly, taking into account an equitable geographical distribution, shall elect the Members entitled to designate a person to serve on the Board. Each of these Members should appoint to the Board a person technically qualified in the field of health, who may be accompanied by alternates and advisers.

Article 25.

These Members shall be elected for three years and may be re-elected; provided that of the Members elected at the first session of the Health Assembly, the terms of six Members shall be for one year and the terms of six Members shall be for two years, as determined by lot.

Article 26.

The Board shall meet at least twice a year and shall determine the place of each meeting.

Article 27.

The Board shall elect its Chairman from among its members and shall adopt its own rules of procedure.

Article 28.

The functions of the Board shall be:

- (a) to give effect to the decisions and policies of the Health Assembly;
- (b) to act as the executive organ of the Health Assembly;
- (c) to perform any other functions entrusted to it by the Health Assembly;
- (d) to advise the Health Assembly on questions referred to it by that body and on matters assigned to the Organization by conventions, agreements and regulations;
- (e) to submit advice or proposals to the Health Assembly on its own initiative;
- (f) to prepare the agenda of meetings of the Health Assembly;
- (g) to submit to the Health Assembly for consideration and approval a general programme of work covering a specific period;
- (h) to study all questions within its competence;
- (i) to take emergency measures within the functions and financial resources of the Organization to deal with events requiring immediate action. In particular it may authorize the Director-General to take the necessary steps to combat epidemics, to participate in the organization of health relief to victims of a calamity and to undertake studies and research the urgency of which has been drawn to the attention of the Board by any Member or by the Director-General.

Article 29.

The Board shall exercise on behalf of the whole Health Assembly the powers delegated to it by that body.

CHAPTER VII - THE SECRETARIAT

Article 30.

The Secretariat shall comprise the Director-General and such technical and administrative staff as the Organization may require.

Article 31.

The Director-General shall be appointed by the Health Assembly on the nomination of the Board on such terms as the Health Assembly may determine. The Director-General, subject to the authority of the Board, shall be the chief technical and administrative officer of the Organization.

Article 32.

The Director-General shall be ex officio Secretary of the Health Assembly, of the Board, of all commissions and committees of the Organization and of conferences convened by it. He may delegate these functions.

Article 33.

The Director-General or his representative may establish a procedure by agreement with Members, permitting him, for the purpose of discharging his duties, to have direct access to their various departments, especially to their health administrations and to national health organizations, governmental or nongovernmental. He may also establish direct relations with international organizations whose activities come within the competence of the Organization. He shall keep Regional Offices informed on all matters involving their respective areas:

Article 34.

The Director-General shall prepare and submit annually to the Board the financial statements and budget estimates of the Organization.

Article 35.

The Director-General shall appoint the staff of the Secretariat in accordance with staff regulations established by the Health Assembly. The paramount consideration in the employment of the staff shall be to assure that the efficiency, integrity and internationally representative character of the Secretariat shall be maintained at the highest level. Due regard shall be paid also to the importance of recruiting the staff on as wide a geographical basis as possible.

Article 36.

The conditions of service of the staff of the Organization shall conform as far as possible with those of other United Nations organizations.

Article 37.

In the performance of their duties the Director-General and the staff shall not seek or receive instructions from any Government or from any authority external to the Organization. They shall refrain from any action which might reflect on their position as international officers. Each Member of the Organization on its part undertakes to respect the exclusively international character of the Director-General and the staff and not to seek to influence them.

CHAPTER VIII - COMMITTEES

Article 38.

The Board shall establish such committees as the Health Assembly may direct and, on its own initiative or on the proposal of the Director-General, may establish any other committees considered desirable to serve any purpose within the competence of the Organization.

Article 39.

The Board, from time to time and in any event annually, shall review the necessity for continuing each committee.

Article 40.

The Board may provide for the creation of or the participation by the Organization in joint or mixed committees with other organizations and for the representation of the Organization in committees established by such other organizations.

CHAPTER IX — CONFERENCES

Article 41.

The Health Assembly or the Board may convene local, general, technical or other special conferences to consider any matter within the competence of the Organization and may provide for the representation at such conferences of international organizations and, with the consent of the Government concerned, of national organizations, governmental or non-governmental. The manner of such representation shall be determined by the Health Assembly or the Board.

Article 42.

The Board may provide for representation of the Organization at conferences in which the Board considers that the Organization has an interest.

CHAPTER X — HEADQUARTERS

Article 43.

The location of the headquarters of the Organization shall be determined by the Health Assembly after consultation with the United Nations.

CHAPTER XI — REGIONAL ARRANGEMENTS

Article 44.

- (a) The Health Assembly shall from time to time define the geographical areas in which it is desirable to establish a regional organization.
- (b) The Health Assembly may, with the consent of a majority of the Members situated within each area so defined, establish a regional organization to meet the special needs of such area. There shall not be more than one regional organization in each area.

Article 45.

Each regional organization shall be an integral part of the Organization in accordance with this Constitution.

Article 46.

Each regional organization shall consist of a Regional Committee and a Regional Office.

Article 47.

Regional Committees shall be composed of representatives of the Member States and Associate Members in the region concerned. Territories or groups of territories within the region, which are not responsible for the conduct of their international relations and which are not Associate Members, shall have the right to be represented and to participate in Regional Committees. The nature and extent of the rights and obligations of these territories or groups of territories in Regional Committees shall be determined by the Health Assembly in consultation with the Member or other authority having responsibility for the international relations of these territories and with the Member States in the region.

Article 48.

Regional Committees shall meet as often as necessary and shall determine the place of each meeting.

Article 49.

Regional Committees shall adopt their own rules of procedure.

Article 50.

The functions of the Regional Committee shall be:

- (a) to formulate policies governing matters of an exclusively regional character;
- (b) to supervise the activities of the Regional Office;
- (c) to suggest to the Regional Office the calling of technical conferences and such additional work or investigation in health matters as in the opinion of the Regional Committee would promote the objective of the Organization within the region;
- (d) to co-operate with the respective regional committees of the United Nations and with those of other specialized agencies and with other regional international organizations having interests in common with the Organization;

- (e) to tender advice, through the Director-General, to the Organization on international health matters which have wider than regional significance;
- (f) to recommend additional regional appropriations by the Governments of the respective regions if the proportion of the central budget of the Organization allotted to that region is insufficient for the carrying out of the regional functions;
- (g) such other functions as may be delegated to the Regional Committee by the Health Assembly, the Board or the Director-General.

Article 51.

Subject to the general authority of the Director-General of the Organization, the Regional Office shall be the administrative organ of the Regional Committee. It shall, in addition, carry out within the region the decisions of the Health Assembly and of the Board.

Article 52.

The head of the Regional Office shall be the Regional Director appointed by the Board in agreement with the Regional Committee.

Article 53.

The staff of the Regional Office shall be appointed in a manner to be determined by agreement between the Director-General and the Regional Director.

Article 54.

The Pan American sanitary organization represented by the Pan-American Sanitary Bureau and the Pan-American Sanitary Conferences, and all other intergovernmental regional health organizations in existence prior to the date of signature of this Constitution, shall in due course be integrated with the Organization. This integration shall be effected as soon as practicable through common action based on mutual consent of the competent authorities expressed through the organizations concerned.

CHAPTER XII — BUDGET AND EXPENSES

Article 55.

The Director-General shall prepare and submit to the Board the annual budget estimates of the Organization. The Board shall consider and submit to the Health Assembly such budget estimates, together with any recommendations the Board may deem advisable.

Article 56.

Subject to any agreement between the Organization and the United Nations, the Health Assembly shall review and approve the budget estimates and shall apportion the expenses among the Members in accordance with a scale to be fixed by the Health Assembly.

Article 57.

The Health Assembly or the Board acting on behalf of the Health Assembly may accept and administer gifts and bequests made to the Organization provided that the conditions attached to such gifts or bequests are acceptable to the Health Assembly or the Board and are consistent with the objective and policies of the Organization.

Article 58.

A special fund to be used at the discretion of the Board shall be established to meet emergencies and unforeseen contingencies.

CHAPTER XIII - VOTING

Article 59.

Each Member shall have one vote in the Health Assembly.

Article 60.

- (a) Decisions of the Health Assembly on important questions shall be made by a two-thirds majority of the Members present and voting. These questions shall include: the adoption of conventions or agreements; the approval of agreements bringing the Organization into relation with the United Nations and intergovernmental organizations and agencies in accordance with Articles 69, 70 and 72; amendments to this Constitution.
- (b) Decisions on other questions, including the determination of additional categories of questions to be decided by a two-thirds majority, shall be made by a majority of the Members present and voting.
- (c) Voting on analogous matters in the Board and in committees of the Organization shall be made in accordance with paragraphs (a) and (b) of this Article.

CHAPTER XIV — REPORTS SUBMITTED BY STATES

Article 61.

Each Member shall report annually to the Organization on the action taken and progress achieved in improving the health of its people.

Article 62

Each Member shall report annually on the action taken with respect to recommendations made to it by the Organization and with respect to conventions, agreements and regulations.

Article 63.

Each Member shall communicate promptly to the Organization important laws, regulations, official reports and statistics pertaining to health which have been published in the State concerned.

Article 64.

Each Member shall provide statistical and epidemiological reports in a manner to be determined by the Health Assembly.

Article 65.

Each Member shall transmit upon the request of the Board such additional information pertaining to health as may be practicable.

CHAPTER XV — LEGAL CAPACITY, PRIVILEGES AND IMMUNITIES

Article 66.

The Organization shall enjoy in the territory of each Member such legal capacity as may be necessary for the fulfilment of its objective and for the exercise of its functions.

Article 67.

(a) The Organization shall enjoy in the territory of each Member such privileges and immunities as may be necessary for the fulfilment of its objective and for the exercise of its functions.

(b) Representatives of Members, persons designated to serve on the Board and technical and administrative personnel of the Organization shall similarly enjoy such privileges and immunities as are necessary for the independent exercise of their functions in connection with the Organization.

Article 68.

Such legal capacity, privileges and immunities shall be defined in a separate agreement to be prepared by the Organization in consultation with the Secretary-General of the United Nations and concluded between the Members.

CHAPTER XVI — RELATIONS WITH OTHER ORGANIZATIONS

Article 69.

The Organization shall be brought into relation with the United Nations as one of the specialized agencies referred to in Article 57 of the Charter of the United Nations. The agreement or agreements bringing the Organization into relation with the United Nations shall be subject to approval by a two-thirds vote of the Health Assembly.

Article 70.

The Organization shall establish effective relations and co-operate closely with such other inter-governmental organizations as may be desirable. Any formal agreement entered into with such organizations shall be subject to approval by a two-thirds vote of the Health Assembly.

Article 71.

The Organization may, on matters within its competence, make suitable arrangements for consultation and co-operation with non-governmental international organizations and, with the consent of the Government concerned, with national organizations, governmental or non-governmental.

Article 72.

Subject to the approval by a two-thirds vote of the Health Assembly, the Organization may take over from any other international organization or agency whose purpose and activities lie within the field of competence of the Organization such functions, resources and obligations as may be conferred upon the Organization by international agreement or by mutually acceptable arrangements entered into between the competent authorities of the respective organizations.

CHAPTER XVII — AMENDMENTS

Article 73.

Texts of proposed amendments to this Constitution shall be communicated by the Director-General to Members at least six months in advance of their consideration by the Health Assembly. Amendments shall come into force for all Members when adopted by a two-thirds vote of the Health Assembly and accepted by two-thirds of the Members in accordance with their respective constitutional processes.

CHAPTER XVIII — INTERPRETATION

Article 74.

. The Chinese, English, French, Russian and Spanish texts of this Constitution shall be regarded as equally authentic.

Article 75.

Any question or dispute concerning the interpretation or application of this Constitution which is not settled by negotiation or by the Health Assembly shall be referred to the International Court of Justice in conformity with the Statute of the Court, unless the parties concerned agree on another mode of settlement.

Article 76.

Upon authorization by the General Assembly of the United Nations or upon authorization in accordance with any agreement between the Organization and the United Nations, the Organization may request the International Court of Justice for an advisory opinion on any legal question arising within the competence of the Organization.

Article 77.

The Director-General may appear before the Court on behalf of the Organization in connection with any proceedings arising out of any such request for an advisory opinion. He shall make arrangements for the presentation of the case before the Court including arrangements for the argument of different views on the question.

CHAPTER XIX - ENTRY INTO FORCE

Article 78.

Subject to the provisions of Chapter III, this Constitution shall remain open to all States for signature or acceptance.

Article 79.

- (a) States may become parties to this Constitution by:
 - (i) signature without reservation as to approval;
 - (ii) signature subject to approval followed by acceptance; or
 - (iii) acceptance.
- (b) Acceptance shall be effected by the deposit of a formal instrument with the Secretary-General of the United Nations.

Article 80.

This Constitution shall come into force when twenty-six Members of the United Nations have become parties to it in accordance with the provisions of Article 79.

Article 81.

In accordance with Article 102 of the Charter of the United Nations, the Secretary-General of the United Nations will register this Constitution when it has been signed without reservation as to approval on behalf of one State or upon deposit of the first instrument of acceptance.

Article 82.

The Secretary-General of the United Nations will inform States parties to this Constitution of the date when it has come into force. He will also inform them of the dates when other States have become parties to this Constitution.

In faith whereof the undersigned representatives having been duly authorized for that purpose, sign this Constitution.

DONE in the City of New York this twenty-second day of July 1946, in a single copy in the Chinese, English, French, Russian and Spanish languages, each text being equally authentic. The original texts shall be deposited in the archives of the United Nations. The Secretary-General of the United Nations will send certified copies to each of the Governments represented at the Conference.

Argentina	Alberto Zwanck	ad referendum	
Australia	A. H. TANGE	Subject to approval and acceptance by Govern- ment of Commonwealth of Australia	
Belgium	DR. M. DE LAET	Subject to ratification	
Bolivia	Luis V. Sotelo	ad referendum	
Brazil	GERALDO H. DE PAULA SOUZA	ad referendum	
Byelorussian Soviet Socialist Republic	N. EVSTAFIEV	Subject to ratification by the Government	
Canada	BROOKE CLAXTON BROCK CHISHOLM	Subject to approval ¹	
Chile	Julio Bustos	Subject to Constitutional approval	
China	SHEN J. K. L. CHIN YUAN SZEMING SZE		
Colombia	CARLOS URIBE AGUIRRE	ad referendum	
Costa Rica	JAIME BENAVIDES	ad referendum	
Cuba	Dr. Pedro Nogueira Victor Santamarina	ad referendum	
Czechoslovakia	Dr. Josef Cančik	ad referendum	
Denmark	J. Oerskov	ad referendum	
Dominican Republic	Dr. L. F. THOMEN	ad referendum	
Ecuador	R. Nevarez Vásquez	ad referendum	
Egypt	DR. A. T. CHOUCHA TAHA ELSAYED NASR BEY M. S. ABAZA	Subject to ratification	
El Salvador	ARISTIDES MOLL	ad referendum	
Ethiopia	G. TESEMMA	Subject to ratification	
France	J. Parisot	ad referendum	
Greece	Dr. Phokion Kopanaris	ad referendum	
Guatemala	G. Morán J. A. Muñoz	ad referendum	
Haiti	Rulx León	ad referendum	
Honduras	Juan Manuel Fiallos	ad referendum	
India	C. K. LAKSHMANAN C. MANI	Subject to ratification. These signatures are appended in agreement with His Majesty's Representative for the exercise of the functions of the Crown in its relations with the Indian States	
Iran	GHASSEME GHANI H. HAFEZI	Subject to ratification by Iranian Parliament (Madjliss)	
¹ Formal instrument of acceptance by Canada dated 21 August 1946 was deposited			

¹ Formal instrument of acceptance by Canada dated 21 August 1946 was deposited with the Secretary-General of the United Nations on 29 August 1946.

Irag	S. AlZahawi Dr. Ihsan Dogramaji	ad referendum
Lebanon	Georges Hakim Dr. A. Makhlouf	ad referendum
Liberia	JOSEPH NAGBE TOGBA JOHN B. WEST	ad referendum
Luxemburg	Dr. M. DE LAET	Subject to ratification
Mexico	Mondragón .	ad referendum
Netherlands ·	C. VAN DEN BERG C. BANNING W. A. TIMMERMAN	ad referendum
New Zealand	T. R. RITCHIE	ad referendum
Nicaragua	A. SEVILLA-SACASA	ad referendum
Norway	HANS TH. SANDBERG	ad referendum
Panama	J. J. Vallarino	ad referendum
Paraguay	Angel R. Ginés	ad referendum
Рети	Carlos Enrique Paz Soldán A. Toranzo	ad referendum
Republic of the Philippines	H. LARA WALFRIDO DE LEON	ad referendum
Poland	Edward Grzegorzewski	ad referendum
Saudi Arabia	Dr. Yahia Nasri Dr. Medhat Cheikh-Al-Ardi	Subject to ratification
Syria	Dr. C. Trefi	Subject to ratification
Turkey	Z. N. Barker	Subject to ratification. I sign subject to approval and confirmation by my Government
Ukrainian Soviet Socialist Republic	L. I. MEDVED I. I. KALTCHENKO	Subject to ratification by the Supreme Council of the Ukrainian Soviet So- cialist Republic
Union of Soviet Socialist Republics	F. G. KROTKOV	Subject to ratification by the Presidium of the Supreme Council of the USSR
Union of South Africa	H. S. GEAR	ad referendum
United Kingdom of Great Britain and Northern Ireland	MELVILLE D. MACKENZIE G. E. YATES	
United States of America	7 THOMAS PARRAN MARTHA M. ELIOT FRANK G. BOUDREAU	Subject to approval
Uruguay	José A. Mora R. Rivero Carlos M. Barberousse	ad referendum
Venezuela	A. Arreaza Guzmán	ad referendum
Yugoslavia	Dr. A. Stampar	With reservation as to ratification

A	fgi	hanistan

477	m *	*****
Albania	T. JAKOVA	With reservation
Austria	Dr. Marius Kaiser	With reservation
Bulgaria	Dr. D. P. Orahovatz	Subject to ratification
Eire	JOHN D. MACCORMACK	Subject to acceptance
Finland	Osmo Turpeinen	ad referendum

Hungary

Iceland

Italy GIOVANNI ALBERTO Subject to ratification

CANAPERIA

PortugalFrancisco C. Cambournac Subject to ratification

Roumania

BUNLIANG TAMTHAI Subject to approval Siam

Sweden

Dr. J. Eugster A. Sauter Switzerland Subject to ratification

Dr. D. P. Tutunji Subject to ratification Transjordan

Yemen

CHRONICLE OF THE WORLD HEALTH ORGANIZATION

VOL. I, No. 3-4

1947

INTERIM PERIOD

The sixty-four States which took part in the International Health Conference held in New York between 19 June and 22 July 1946, drew up a Constitution which was signed in New York on 22 July. This act, a veritable "Magna Carta" of international co-operation in the field of health, will become legally valid when twenty-six Member States of the United Nations have unconditionally accepted or ratified it. Six months from that date, at the latest, the World Health Assembly will be convened; and at that moment the World Health Organization will come into existence. Until the first meeting of the Assembly, the Organization will be in a preparatory stage and will have the dual task of preparing the ground for the Organization and building the framework for it and of collaborating in the solution of world health problems which cannot be left until the definitive organization comes into being.

These tasks will be carried out by the Secretariat under the orders of an Interim Commission consisting of the representatives of eighteen States elected at New York to serve on it. The Interim Commission must meet at least once every four months.

FIRST SESSION

The first session of the Interim Commission took place in New York from 19 to 23 July 1946.

During the first session, Surgeon-General Thomas Parran (USA) was proposed as temporary Chairman, but he declined the honour

¹ See list of persons present, Annex I.

and suggested Dr. Fedor Grigorievitch Krotkov (USSR), who was unanimously elected by the Commission. At the last meeting of this first session, the Commission elected as its permanent Chairman Dr. Andrija Stampar (Yugoslavia), Vice-President of the Social and Economic Council of the United Nations.

Drs. Aly Tewfik Choucha Pacha, Octavio S. Mondragón and Szeming Sze were elected Vice-Chairmen.

Appointment of Executive Secretary.

The Commission elected as Executive Secretary—i.e., Head of the Secretariat of the Interim Commission—Dr. Brock Chisholm, Deputy Minister of National Health and Welfare, Canada, and Rapporteur of the Technical Preparatory Committee in Paris.

SECOND SESSION

The Interim Commission held its second session in Geneva, from 4-13 November 1946, under the chairmanship of Dr. Andrija STAMPAR. ¹

The work of the Interim Commission will necessarily differ in character from that of WHO when it assumes its final form. The chief task, indeed, of the Interim Commission is not to assist in the solution of the immense number of problems confronting medicine, but mainly to prepare, in conformity with the Constitution signed in New York, the framework of the future organization.

At its first two sessions, the Interim Commission took a number of decisions of great importance, which were implemented by the Secretariat. During the months that elapsed between the New York Conference and 1 January 1947, considerable progress was made; and much of the foundation was laid upon which the World Health Organization will rest. In the following pages, a summary will be found of the work done up to that date by the Interim Commission and its Secretariat.

¹ See list of persons present, Annex II.

ORGANIZATION

DRAFT AGREEMENT BETWEEN THE WORLD HEALTH ORGANIZATION AND THE UNITED NATIONS

The World Health Organization is a specialized agency forming part of the United Nations. Although under the terms of its Constitution, it enjoys a considerable degree of autonomy, not merely from a technical point of view, but also with regard to staff administration and finance, nevertheless, for several fundamental reasons, it must work in close co-operation with the United Nations. Indeed, while it has authority to take all the necessary measures in the field of public health, it must be remembered that the United Nations delegated this authority to it. The San Francisco Charter stipulates that the United Nations shall deal with political, economic, social, health and cultural matters; and it is self-evident that the United Nations must, in these various fields, have responsibilities in common with the various specialized institutions. The scope of these institutions is not always clearly defined and the United Nations must guard against overlapping in their work.

Several specialized agencies are already at work under the ægis of the United Nations, and in the exercise of their functions they often require, in certain matters, the assistance of WHO. Furthermore, the numerous tasks entrusted to the Social and Economic Council have rendered necessary the formation of special committees on statistics, population, habit-forming drugs, transport and communications. All these are highly technical matters which also concern WHO (see the structure of specialized agencies and of the special commissions of the Economic and Social Council in Annex III).

The importance, then, of the relationship between WHO and the United Nations will be readily understood. This relationship will be defined in an agreement which will have to be submitted for approval to the General Assembly of the United Nations and to the World Health Assembly.¹

¹ Document WHO.IC/W.18, Rev. 2, Official Records of WHO, No. 4.

The draft is, in general, in conformity with the pattern of existing agreements between the United Nations and other specialized agencies.

The United Nations recognized the World Health Organization as a specialized agency competent to deal with public health questions. To ensure close co-operation, it was laid down that representatives of the United Nations may attend all the meetings held under the ægis of WHO. Similarly, representatives of WHO will be invited to attend, in a consultative capacity, the meetings of the General Assembly of the United Nations and of its committees, of the Economic and Social Council and of the Trusteeship Council when questions relating to health are under discussion.

The two organizations may reciprocally make recommendations or ask for matters within their competence to be included in the agenda.

Before coming to a decision regarding the final location of its headquarters, WHO will consult with the United Nations. As far as possible, its regional offices will be closely associated with those of the United Nations.

The Executive Secretary was requested to begin preliminary discussions with the Secretary-General of the United Nations. The formation of a special Negotiating Committee was postponed until the third session.

TRANSFER OF THE LEAGUE OF NATIONS' FUNCTIONS IN THE FIELD OF HEALTH ¹

After the end of the First World War, the Health Organization of the League of Nations was extremely active in the field of public health. During the Second World War, the Health Section was able to continue, with a much reduced staff, the two tasks which did not require meetings of technical committees: a part of the Epidemiological Intelligence and Health Statistics Department, and also the Administration of International Biological Standards, continued their work.

The Governments represented in the General Assembly of the United Nations decided on 12 February 1946 to transfer to the United Nations the League of Nations' activities in the field of

¹ Document WHO.IC/W.11, Off. Rec. WHO, No. 4.

Health. This decision was endorsed in April 1946 by the League of Nations' last Assembly. The Technical Preparatory Committee which met in Paris in April 1946 also recommended the transfer, as did the Economic and Social Council during its meeting in June of that year. Although this decision had not yet been implemented, the Governments represented at the New York Conference instructed the Interim Commission, on 22 July, to take over from the United Nations the functions which the latter was to inherit from the League of Nations.

The effective transfer of the functions of the League of Nations to the United Nations took place on 31 August 1946.

The principle of the Arrangement concluded at New York was approved by the Economic and Social Council on 17 September 1946: under the terms of this, the nucleus of officials who made up the personnel of the Health Section of the League of Nations, together with the activities of that Section, were handed over to the Interim Commission of the World Health Organization on 16 October 1946.

TRANSFER OF THE FUNCTIONS OF THE "OFFICE INTERNATIONAL D'HYGIÈNE PUBLIQUE" 1

In accordance with the Protocol signed in New York on 22 July, the activities of the Office International d'Hygiène Publique will be taken over by WHO or its Interim Commission when twenty governments, signatories to the 1907 Arrangement, shall have become parties to the Protocol.² The Interim Commission was authorized under the terms of the Arrangement signed on 22 July 1946, at New York, to take all steps necessary to effect this transfer. A Sub-Committee consisting of representatives from the Netherlands, Mexico and Australia was formed to this end.

Further, on 31 October 1946, the Permanent Committee of the Office International d'Hygiène Publique adopted a Resolution authorizing the Chairman, in conjunction with the Committee on Finance and Transfer, or with any two members of this Committee, to take, on behalf of the Office, the measures required for a transfer.

The work of the Epidemiological Intelligence Department of the Office was taken over by the Interim Commission on 1 January 1947.

¹ Document WHO.IC/W.41., Off. Rec. WHO, No. 4.

² See WHO Chronicle, Vol. I, No. 1-2, p. 11.

TRANSFER OF UNRRA'S HEALTH ACTIVITIES

The Arrangement concluded by the Governments represented at New York in 1946 instructs the Interim Commission to "take all necessary steps for assumption . . . of the duties and functions entrusted to the United Nations Relief and Rehabilitation Administration in the field of health . . . "

The Interim Commission thus became responsible for:

- (a) The epidemiological work entrusted to UNRRA;
- (b) Certain other UNRRA health activities.

The epidemiological responsibilities of UNRRA include the maintenance of a service of epidemiological notifications and information which UNRRA had itself taken over from the Paris Office during the war. UNRRA was further responsible for the application of the International Sanitary Convention of 1944 (which is a revision of the 1926 Convention), and of the International Sanitary Convention for Aerial Navigation of 1944 (which is a revision of that of 1933). As a result of an exchange of letters between the Director-General of UNRRA and the Executive Secretary of the Interim Commission, these epidemiological functions were transferred to WHO on 1 December 1946.

For the transference of UNRRA'S other health activities, the Interim Commission, at its first meeting, appointed a Committee on Negotiations consisting of Drs. Thomas Parran, Szeming Sze and G. de Paula Souza. After negotiations had taken place in New York and at Lake Success in October 1946, the Representatives of UNRRA and WHO worked out a draft agreement, in which it was laid down that other UNRRA activities in the field of health would be taken over by WHO on 1 January 1947 for Europe and on 1 April 1947 for the Far East, with the exception, however, of the medical care of displaced persons. The Agreement also provided for the transfer of the necessary funds to the Interim Commission to carry out these functions, up to a total of 1,500,000 dollars.

This sum is being devoted to ensuring the continuity, on a reduced scale, of the health services rendered to UNRRA-aided

¹ Document WHO.IC/W.13, Off. Rec. WHO, No. 4.

countries, 1 so that a sudden cessation of UNRRA's health work would not bring about dislocation and perhaps epidemic disasters.

The draft agreement between UNRRA and WHO provided for a programme of general advice and assistance in public health and medicine, including missions of experts, to be drawn up in consultation with the Governments concerned. Special mention was made of the needs of China and Ethiopia and of the importance of the programmes for the control of tuberculosis and malaria. The need to continue UNRRA's programme of fellowships and other educational activities was also stressed. This was interpreted by the Interim Commission to include study tours for senior specialists, visiting lecturers and the supply of medical books and periodicals, but it was made clear that medical and sanitation supplies could not be furnished under the budget available. In addition, UNRRA agreed to furnish WHO with records, equipment and material relating to its health functions.

The Interim Commission examined this draft agreement at its second session, suggested one small addition and approved it for signature: it was signed by the Director-General of UNRRA and the Executive Secretary of the Interim Commission on 9 December 1946.

NEGOTIATIONS FOR THE INTEGRATION OF THE PAN AMERICAN SANITARY ORGANIZATION

Article 54 of the Constitution of the World Health Organization deals with the integration of the Pan American Sanitary Organization with WHO "through action based on mutual consent of the competent authorities expressed through the organizations concerned."

The Interim Commission was instructed to take preparatory steps with the Pan American Sanitary Organization. With this object it appointed, at its first session, a Negotiating Sub-Committee consisting of the representatives from Brazil, the United States of America, Mexico and Venezuela. The composition of this Sub-Committee testified to the importance attached by the Interim Commission to the question, and also to its desire for a solution which should be entirely satisfactory to the American States, without outside interference.

¹ Albania, Austria, Byelorussia, China, Czechoslovakia, Ethiopia, Finland, Greece, Hungary, Italy, Korea, Philippines, Poland, Ukraine and Yugoslavia.

Co-operation between WHO and Other Specialized United Nations Agencies

In certain respects, WHO and other agencies have interests ni common and it is desirable that they should exchange technical aid and co-operation. There are certain matters which concern only one organization; on the other hand, there are numerous others coming within the sphere of several, and these should not be dealt with by each organization separately, as to do so might cause considerable duplication and confusion. In order to avoid this, it will be necessary to conclude a series of agreements between WHO and the other specialized agencies of the United Nations.

The Secretariat felt that such agreements should be based upon a number of fundamental principles, and therefore drew up a memorandum giving a brief historic sketch of the relationships between WHO and other specialized organizations, and laying down certain principles upon which collaboration was based. This memorandum was examined by the Interim Commission at its second session and, in its general outline, approved.

Every specialized institution has its own sphere of activity, for which it is essentially responsible. No institution should encroach upon another's activities without previous consultation and agreement. Co-operation between two institutions should help to bring together the experts in various related, but different and complementary, fields, in order to examine the problems which they have in common. This is far more satisfactory than separate meetings of specialists considering the problems from the same view-point, but appointed by different institutions. Joint committees are the best way to secure the co-operation of experts, although this method should not necessarily imply equal representation of the organizations concerned. When matters which concern two agencies are particularly complex, several specialized Sub-Committees may be set up. The co-operation between specialized agencies should not be confined to joint committees; a systematic exchange of publications should also be made; and observers from other specialized agencies should be invited to annual sessions and important confer-Permanent liaison agents should be invited to join the Secretariats of other specialized agencies with which WHO is in close collaboration 1.

Document WHO.IC/W.8, Off. Rec. WHO, No. 4.

Co-operation with the Food and Agricultural Organization (FAO)

The two organizations have several fields of activity in common. The most important is undoubtedly that of nutrition. Both bodies are concerned with nutrition although from different angles, and this is a typical example of a case requiring the setting-up of a Joint Committee with equal representation.

Sir John Boyd Orr, the Director-General of FAO, invited WHO to send an observer to the second session of FAO's annual Conference, opening at Copenhagen on 2 September 1946.

Dr. Evang was present during the early part of the Conference, and Dr. BIRAUD took his place later. The WHO representatives proposed the formation of a Joint Nutrition Committee to advise both FAO and WHO. They suggested that this might be more practical than two separate Nutrition Committees—one for each organization—with a joint liaison committee in addition. Following this proposal, the FAO Permanent Food and Agriculture Committees, at a joint meeting, put forward a recommendation for the creation of a permanent Joint Committee on Rural Hygiene, which is another question of importance to both bodies. The question was referred to the FAO Conference for its approval.

Co-operation with the International Labour Organization (ILO).

The ILO and WHO have several fields in common. Most important among these is the question of sickness insurance, which, in many countries, is the chief method of providing medical aid for the working population: another is industrial hygiene.

In the past there was a Joint Committee on Social Medicine, which included representatives of the League of Nations Health Organization and the ILO. This Committee's task was to avoid duplication and to consider the possibility of directing sickness insurance institutions towards prevention. A special joint subcommittee was formed to deal with tuberculosis. Industrial hygiene was dealt with exclusively by ILO's expert bodies, except for the question of anthrax, which was referred to a joint sub-committee.

During the war, while the League of Nations Health Organization was paralysed, the ILO naturally tended to expand its field beyond the scope of health insurance to the domain of medical and sanitary aid for the whole population, and even to the professional training of doctors, dentists, etc. Since then, the International Health

Conference has clearly laid it down that curative and preventive medicine should constitute WHO's particular sphere.

The Administrative Council of the ILO, during its twenty-ninth session, declared that it was prepared to co-operate with WHO on the bases laid down in the latter's Constitution.

In September 1946, the Executive Secretary of WHO suggested to Mr. Edward Phelan, Director of the ILO, the formation of two joint technical commissions to deal with:

- (1) industrial hygiene; and
- (2) the provision of medical care.

Co-operation with the Provisional International Civil Aviation Organization (PICAO).

In 1933, the International Commission for Aerial Navigation (CINA) co-operated with the Office International d'Hygiène Publique in the drafting of an International Sanitary Convention for Aerial Navigation. Later it received from UNRRA, in agreement with the latter's Convention on Aerial Navigation, a list of sanitary aerodromes, information about special agreements dealing with aerial sanitation measures and information about fees for sanitary operations. PICAO, which is the successor of CINA, will be in need of similar assistance from WHO, which will, moreover, have to supply information concerning the international rules governing the certification of inoculation and vaccination, and the new forms of international certificates relating thereto; disinsectization and deratization of sanitary aerodromes; and personal and aircraft declarations of health (international forms): for PICAO has a very direct interest in all these matters.

Mr. Albert ROPER, Secretary-General of PICAO, has expressed his organization's wish to be represented at the discussions for the revision of the Sanitary Convention for Aerial Navigation, and has suggested that one or more joint committees be formed within or under the Committee on Quarantine of the Interim Commission of WHO. On 7 October 1946, the Executive Secretary agreed to the principle of such representation.

Co-operation with the United Nations Educational, Scientific and Cultural Organization (UNESCO).

As a specialized agency dealing with educational and scientific questions, UNESCO is bound to extend its activities to matters which

concern WHO and vice versa. Co-operation between the two organizations promises to be fruitful; but there is a danger of overlapping. For this reason, an agreement for collaboration between WHO and UNESCO is most urgently needed.

Even before the WHO Interim Commission was set up, UNESCO invited it to be represented at the fifth session of its Preparatory Commission in London on 5 July; Dr. Neville GOODMAN represented WHO. Later, during the first session of UNESCO's General Conference which took place in Paris on 19 November 1946, the Interim Commission was represented by its Executive Secretary, Dr. Brock Chisholm.

The Secretariat of UNESCO submitted unofficially to the Secretariat of the Interim Commission a draft agreement between WHO and UNESCO, in which the setting-up of a joint committee was suggested, as well as a number of principles.

These proposals will, of course, have to be submitted to the competent organs of WHO and UNESCO for discussion and approval.

Co-operation between WHO and Non-governmental Organizations

A number of non-governmental medical organizations have already applied to the Secretariat with a view to establishing relations with WHO.

The Secretariat has drawn up a Memorandum ¹ emphasizing that it is highly advisable for WHO to establish co-operation with a number of organizations, such as the International Unions against tuberculosis, against cancer, and against venereal diseases.

Invitations might be extended to these associations to send observers to meetings of technical committees formed by WHO touching their own fields of interest. The Memorandum further points out that WHO might with advantage entrust certain tasks, especially of a clinical nature, to highly-specialized non-governmental professional bodies.

In certain cases, secretariat facilities might be provided to such associations (distribution services, loan of meeting-rooms for sessions, or interpreters for medical congresses, etc.).

¹ Document WHO.IC/W.10, Off. Rec. WHO, No. 4.

The Union internationale contre le Péril vénérien and the International Union against Cancer have already invited the Interim Commission of WHO to be represented on their Executive Committees.

At its second session, the Interim Commission, while admitting that co-operation with non-governmental scientific organizations presents the highest advantages, deemed that no effective aid could be given to such institutions during the interim period.

Pending a decision of the World Health Assembly, the Secretariat was instructed to continue to explore this important question.

COMMITTEES SET UP BY THE INTERIM COMMISSION

The Interim Commission considers that two distinct types of committees are required to enable it to carry out its task satisfactorily.

The internal Committees consist of members of the Interim Commission, and their activities are mostly of an administrative character: Financial, Relations, Location of Permanent Headquarters, Epidemiology and Quarantine, etc.

The technical Committees, on the other hand, consist entirely of specialists holding the highest qualifications in their respective fields. In so far as this is possible, geographical distribution will also be considered, but it will be a secondary consideration.

Members of technical Committees are appointed jointly by the Chairman of the Interim Commission and the Executive Secretary.

INTERNAL COMMITTEES

Committee on Administration and Finance.

During the International Health Conference, the United Nations offered to make available to the Interim Commission a certain sum in the form of a loan, which would enable the Commission to begin its work without delay. The Commission was asked to submit a draft budget to the United Nations before 1 August 1946, and it was therefore necessary that a Committee on Administration and Finance should be formed at the first session of the Interim Commission.

The representatives of the following nations were appointed members of this Committee:

Canada Mexico United Kingdom

China Netherlands United States of America

France Ukrainian SSR Yugoslavia.

The Committee was the only one to be convened during the first session: for the remaining months of 1946, it adopted a budget of expenditure of \$300,000, and a budget of \$1,000,000 for 1947.

The Secretariat was authorized to take over a number of former officials of the Health Section of the League of Nations, of the Office International d'Hygiène Publique in Paris and of the UNRRA Health Division.

The Committee also decided to establish scales of salaries and terms of recruitment for the technical and administrative staff of the Commission, to approve Staff Regulations and the general organization of the Secretariat of the Commission.

Towards the end of the second session, a Sub-Committee on the Field Services Budget (UNRRA Funds) was set up with instructions to meet early in 1947 and consider the replies received from UNRRA-aided countries as to the assistance they would require and to make budget allocations (see p. 48). The Sub-Committee was composed of the representatives from Canada, China, Ukraine, the United States of America and Yugoslavia, with the Chairman of the Committee on Administration and Finance—i.e., the representative of the Netherlands as Chairman.

Committee on Relations.

The Committee on Relations has the important task of negotiating with international health organizations to be integrated with WHO, and also of preparing draft agreements with the specialized agencies—governmental or otherwise—with whom it is desirable for WHO to work. Lastly, the Committee on Relations is responsible for studying relations with other organizations, national and international.

The Committee consists of nine members. It was set up by the Interim Commission at its first session. Representatives from the following countries were elected to serve on it:

Australia Mexico United States of America

Brazil Netherlands Union of Soviet Socialist Republics

Egypt Norway Venezuela.

Committee on Permanent Headquarters.

Under the Arrangement signed in New York on 22 July 1946, the Interim Commission was entrusted with the task of "making studies regarding the location of the permanent headquarters of the World Health Organization". During its second session, the Commission appointed a Committee of five members—viz.: the representatives from Canada, Egypt, India, Mexico and Norway.

The Interim Commission urged that "in making such studies the Committee would, amongst other considerations, pay special attention to the privileges which would be granted by the host State, the internationalization of the seat, accessibility from and to the world at large; unrestricted and uninterrupted contact between the WHO and all countries of the world, climatic conditions, general use by the local population of either of the working languages of the United Nations, adequate facilities for the immediate establishment of the necessary offices, printing facilities, etc., and the principle of centralization".

The Committee on Permanent Headquarters, whose chairman is Dr. C. Mani (India), requested the Executive Secretary to enter into contact with the various governments asking them to state their views as to the permanent headquarters of WHO.

Until replies from the various governments have been received and the necessary documentation for the Committee has been prepared, it will not be possible for the Committee to consider visiting eligible sites.

Committee on Epidemiology and Quarantine.

The setting up of a Committee on Epidemiology and Quarantine was considered as one of the most urgent matters before WHO, since, inter alia, questions concerning the amalgamation of the epidemiological services of the Office International d'Hygiène Publique, the Health Organization of the League of Nations and the Health Division of UNRRA were involved.

At its first session, the Interim Commission elected the representatives of the following countries to serve on this Committee:

Brazil India United States of America
China Liberia Union of Soviet Socialist Republics
Egypt Peru Yugoslavia.

France United Kingdom

The Committee's functions include supervising the application of the sanitary conventions now in force and suggesting any desirable modifications; ensuring the smooth working of the epidemiological intelligence services, without which it would be impossible to check the international spread of epidemics; and considering any measures necessary to arrest such epidemics, should they occur.

The Committee met on 12 and 13 November, under the chairmanship of Dr. Melville MACKENZIE. It recommended the formation of a Committee on Quarantine consisting of experts from:

Brazil	France	United Kingdom
China	India	United States of America

Egypt Netherlands Union of Soviet Socialist Republics.

The task of this Committee will be to examine the problems arising out of the application of the existing Sanitary Conventions, including questions concerning yellow fever, as laid down in the Sanitary Conventions of 1944. This Committee will meet twice yearly, preferably while the Interim Commission is in session. The creation of a special sub-committee of yellow-fever experts, to consist of not more than seven members, was also envisaged.

The Committee on Epidemiology and Quarantine unanimously declared that the existing sanitary conventions require revision and that a Committee to deal with this revision should be set up. The Secretariat was requested to gather information on the latest views on quarantine control, and especially on legal changes in relation to quarantine agreements. Pending a meeting of the Committee on Revision, it was decided to appoint a Sub-Committee of six members representing nations directly concerned (Egypt, France, India, Netherlands, Saudi Arabia and United Kingdom) to serve under the Committee on Revision, and to consider the revision of the clauses in the Sanitary Conventions referring to the Mecca Pilgrimages, several Governments having requested such revision in 1946. Dr. Choucha Pacha suggested that the first meeting of this Sub-Committee should be held in Egypt.

The Committee on Epidemiology and Quarantine also considered the actual value of the methods now in use for collecting and disseminating epidemiological information. In accordance with a proposal presented to the Interim Commission by the United States representative, which was adopted by the Committee and passed by the Commission, the Secretariat was requested to invite each Government signatory to the Final Acts of the International Health Conference to furnish the Interim Commission with:

- (a) A statement concerning the practical use to which it puts the epidemiological information it receives from international health agencies (i) by wireless, (ii) by cable, (iii) by mail weekly, monthly and annually;
- (b) A statement concerning the form in which such information would be most useful to it; and
- (c) Recommendations concerning the manner in which a unified epidemiological information service might be of the greatest practical assistance to it in protecting itself against the incursion of disease.

Finally, the Committee discussed malaria, tropical diseases, the study of health services in various countries, and venereal diseases. These questions are dealt with later under separate headings.

BUDGET

The total WHO budget for the remainder of 1946 and for 1947 amounts to \$2,800,000. This sum includes \$1,500,000 transferred from UNRRA funds to the Interim Commission to enable the latter to continue UNRRA's activities in the field of health in a number of war-devastated countries. The remainder consists of sums of \$300,000 and \$1,000,000, which constitute the Organization's own budget for 1946 and 1947, respectively.

The 1947 Budget, among other matters, provides for:

- (a) \$344,500 for meetings and field surveys, including two meetings of the Interim Commission in April and September 1947, the first session of the World Health Assembly, the meetings of the Committee on Epidemiology and Quarantine, those of the Expert Committee on Nomenclature of Causes of Death and Diseases, on Malaria, on Biological Standardization, etc.;
- (b) \$355,500 for salaries, wages and staff expenses;
- (c) \$300,000 for travel and subsistence allowances, office rentals, etc.; assistance to Standardization Laboratories, etc.

TECHNICAL AND MEDICAL ACTIVITIES

MALARIA

At the second session of the Interim Commission, Dr. Arnoldo Gabaldón put forward a proposal for setting up a Malaria Committee, accompanied by a Draft Constitution. Dr. Gabaldón stressed the gravity of the malaria problem in numerous regions, as well as the need to fight the disease systematically.

This document ¹ provides for a Committee consisting of nine members, assisted by regional sub-committees. Its terms of reference include:

- (a) To serve as the co-ordination and information centre;
- (b) To furnish appropriate technical assistance to the national anti-malaria services;
- (c) To collect information on the methods of popular antimalaria education;
- (d) To standardize malarial nomenclature.

The Interim Commission instructed the Committee on Epidemiology and Quarantine to study this proposal. The latter unanimously agreed that the malaria question was of such urgency and importance as to justify immediate action and decided to appoint an expert Sub-Committee of five members to deal with the matter and to make recommendations to the Interim Commission, its first meeting to take place in April 1947.

BIOLOGICAL STANDARDIZATION

The use of medicaments of a known specific action is indispensable in medical therapy. Before the war, thirty-five medicinal substances, which can be assayed only by biological methods, were standardized by experts working under the ægis of the League of Nations Health Organization. Under the terms of its Constitution,

¹ Document WHO.IC/W.27, Off. Rec. WHO, No. 4.

WHO is bound to continue this work. Therefore, the Interim Commission decided to appoint a small body of experts whose number was not to exceed eight, to form the nucleus of the future Committee on Biological Standardization.

These experts will define the subjects which appear to be the most urgent for study and will further submit to the Interim Commission a plan of work covering the setting-up of standard preparations or international units in the fields selected.

YELLOW FEVER

The development of air transport of passengers across endemic yellow-fever areas and the progress made in the use of anti-yellow-fever vaccine made it necessary during the 1944 revision of the International Health Convention for Aerial Navigation to provide for new functions, such as the definition of the boundaries of endemic yellow-fever areas and the control of the quality of the yellow-fever vaccines used. ¹

The Interim Commission adopted a Draft Resolution submitted by the United States representative authorizing the setting up of a Technical Commission on Yellow Fever, not to exceed seven members, whose duty shall be to carry out, on behalf of the Interim Commission, the special functions in regard to yellow fever assigned to UNRRA by the Sanitary Conventions of 1944.

PLAN FOR AN INSTITUTE FOR TROPICAL DISEASES

Dr. Togba, the representative from Liberia, presented to the second session of the Interim Commission a Resolution proposing "that a Committee of five technical experts be appointed to study not only malaria but other tropical diseases as well, and to recommend to the first World Health Assembly the establishment of a Tropical Disease Institute".

¹ (i) "International Sanitary Convention for Aerial Navigation 1933, modified by International Sanitary Convention for Aerial Navigation 1944", in *Epidemiological Information Bulletin* (UNRRA), Vol. I, No. 4, 28 February 1945, pp. 179-204.

⁽ii) "Yellow-fever Areas", ibid., Vol. I, No. 16, 30 September 1945, pp. 693-700.

⁽iii) "Fourth Report of the Expert Commission on Quarantine", ibid. Vol. II, No. 14, 31 July 1946, pp. 580-86.

The Interim Commission decided to defer the setting-up of this Committee, as it considered itself bound to confine its activities to tasks of an urgent nature or constituting a statutory obligation.

VENEREAL DISEASES

For the same reason, consideration of a joint proposal put forward by the representatives from Brazil, France and Norway was deferred. The proposal requested the immediate setting-up of a Sub-Committee to consider an International Programme in combating Venereal Diseases.

The Commission decided for the time being to appoint an outside expert in venereal diseases to draw up proposals for immediate action in matters concerning venereal diseases.

STUDY OF PUBLIC HEALTH SERVICES AND TRAINING OF MEDICAL PERSONNEL

At the second session of the Interim Commission, the representatives from Brazil and Norway presented a proposal for the appointment of a "Technical Committee not to exceed five persons to undertake a preliminary comparative study on the organization, size and strength of the Central Public Health Services in various countries and to report to the third session of the Interim Commission".

Further, the representatives from Brazil and France proposed, at the same session, that the Interim Commission "being convinced of the capital importance, for the execution of public health programmes, of having competent staff in all domains of health work, authorizes its Chairman and Executive Secretary to appoint a committee of three members to undertake an enquiry, and make investigations as to the resources at present available in the various countries for the training of the medical and other staff essential for public health services".

The Interim Commission did not feel qualified to deal with these proposals during the present transition period but decided to recommend their inclusion in the agenda of the first World Health Assembly. It also decided to request the Secretariat, in the interval, to prepare a note giving a history of the work accomplished to date in this field and formulating proposals for its continuation and extension.

INTERNATIONAL LISTS OF CAUSES OF DEATH AND MORBIDITY

Medical statistics are the foundation of medical progress; and a list of causes of death and morbidity is indispensable for their establishment. In the early years of this century, the first list of causes of morbidity was drawn up; but none of the international lists of causes of morbidity hitherto proposed has been satisfactory. Under the terms of its Constitution, it will be WHO's task to "establish and revise as necessary, international nomenclature of diseases, of causes of deaths and of public health practices". In view of this, the Interim Commission, on the proposal of the representatives of the United States, the United Kingdom, Venezuela and Norway, requested its Chairman and its Executive Secretary to appoint a Technical Committee not to exceed nine persons, to carry out the revision of the International List of Causes of Death and to establish an International List of Causes of Morbidity. The Committee will further deal with the preparatory work for the Sixth Decennial Revision of the International List of Causes of Death, including recommendations to the Commission concerning actions which it might appropriately take to effect the revision.

EXPERT COMMITTEE ON NARCOTIC DRUGS 1

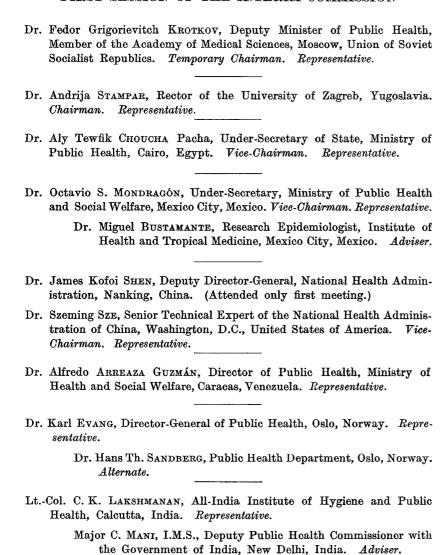
Under the International Conventions of 1925 and 1931 for the suppression of drug traffic the Health Committee of the League of Nations was invested with a technical consultative capacity to determine which substances should come under these Conventions. This task now devolves upon WHO and its Interim Commission; therefore the representative from China, a nation very closely concerned in the struggle against drug traffic, proposed the formation of a Committee of five experts technically qualified in the pharmacological and clinical aspects of drug addiction, to advise the Interim Commission on any technical questions concerning habit-forming drugs which might be referred to it.

This proposal was adopted by the Interim Commission on 11 November 1946.

¹ At its third session, the Interim Commission changed the name of this Committee to "Expert Committee on Habit-forming Drugs".

Annex I.

LIST OF PARTICIPANTS IN THE FIRST SESSION OF THE INTERIM COMMISSION



- Professor Jacques Parisor, Professeur à la Faculté de Médecine de Nancy, France. (Attended first three meetings.)
- Dr. Xavier Leclainche, Inspecteur général au Ministère de la Santé publique, Paris, France. Representative. (Attended only last two meetings.)
- Dr. Melville Mackenzie, Principal Medical Officer, Ministry of Health, London, United Kingdom. Representative.
 - Mr. Gilbert E. Yates, Assistant Secretary, Ministry of Health, London, United Kingdom. Alternate.
- Dr. Levko I. Medved, Deputy Minister of Health, Kiev, Ukrainian S.S.R. Representative.
- Dr. Thomas Parran, Surgeon-General, Public Health Service, Washington, D.C., United States of America. Representative.
 - Dr. James A. Doull, Chief of the Office of International Health Relations, Public Health Service, Washington, D.C., United States of America. *Adviser*.
 - Dr. H. VAN ZILE HYDE, Senior Surgeon, Public Health Service, Washington, D.C., United States of America. Adviser.
 - Dr. Louis B. WILLIAMS, Jr., Medical Director, Public Health Service, Washington, D.C., United States of America. Adviser.
- Dr. Geraldo H. DE PAULA SOUZA, Director of the Faculty of Hygiene and Public Health, University of São Paulo, Brazil. Representative.
- Dr. Carlos E. Paz Soldán, Professor of Hygiene, Faculty of Medicine, University of San Marcos, Lima, Peru. Representative.
- Dr. Brock Chisholm, Deputy Minister of National Health and Welfare, Canada (until elected Executive Secretary of the Interim Commission).
- Dr. T. C. ROUTLEY, General Secretary, Canadian Medical Association, Toronto, Canada. Representative.
- Mr. A. H. Tange, First Secretary, Australian Mission to the United Nations, New York, United States of America. Representative.
 - Sir Raphael CILENTO, Director-General of Health and Medical Services for the State of Queensland, Australia.
 - Mr. A. H. Body, Third Secretary, Australian Mission to the United Nations, New York, United States of America. Adviser.

- Dr. Joseph N. Togba, Physician to the Liberian Government, State Department, Monrovia, Liberia. Representative.
 - Dr. John West, Director of the United States Public Health Service Mission to Liberia, Monrovia, Liberia. Adviser.
- Dr. Cornelis van den Berg, Director-General of Public Health, Ministry of Social Affairs, The Hague, Netherlands. Representative.
 - Dr. W. A. TIMMERMAN, Director of the National Institute of Public Health, Utrecht, Netherlands. Adviser.

Secretariat:

- Dr. Brock Chisholm, Deputy Minister of National Health and Welfare, Canada. (Elected Executive Secretary at first meeting.)
- Dr. Yves M. Biraud, Secretary of the International Health Conference. Secretary pro tem. of the Interim Commission.

Annex II.

LIST OF PARTICIPANTS IN THE SECOND SESSION OF THE INTERIM COMMISSION

- Dr. Andrija Stampar, Rector of the University of Zagreb, Yugoslavia. Chairman. Representative.
 - Mr. Dimitrije Juzbašić, Professor of the Medical School of Skoplje, Yugoslavia. Alternate.
- Dr. Aly Tewfik Choucha Pacha, Under-Secretary of State, Ministry of Public Health, Cairo, Egypt. Vice-Chairman. Representative.
- Dr. Szeming Sze, Resident Representative of the National Health Admistration of China, Washington, D.C., United States of America. Vice-Chairman. Representative.
- Dr. André Cavaillon, Directeur Général de la Santé, Ministère de la Santé publique, Paris, France. Representative.
 - Dr. Lucien Bernard, Médecin Inspecteur de la Santé, Ministère de la Santé publique, Paris, France. Alternate.
 - Dr. Xavier Leclainche, Directeur régional de la Santé, Paris, France. Alternate.
 - Dr. H. Y. SAUTTER, Médecin Inspecteur de la Santé, Ministère de la Santé publique, Paris, France. Alternate.
- Mr. Brooke Claxton, Canadian Minister of National Health and Welfare, Ottawa, Canada. (Attended first meeting only.)
 - Dr. T. C. Routley, General Secretary, Canadian Medical Association, Toronto, Canada. Alternate.
 - Dr. H. A. Ansley, Assistant Director of Health Services, Department of National Health and Welfare, Ottawa, Canada. Adviser.
 - M. Jean Chapdelaine, Secretary, Canadian Embassy in Paris, France. Adviser.
- Dr. Karl Evang, Surgeon-General, Department of Public Health, Oslo, Norway. Representative.
- Dr. Arnoldo Gabaldón, Chief, Malaria Division, Ministry of Health and Social Welfare, Caracas, Venezuela. Alternate.
 - Dr. Dário Curiel, Chief, Division of Epidemiology and Vital Statistics, Ministry of Health and Social Welfare, Caracas, Venezuela. *Alternate*.

- Dr. Santiago Ruesta Marca, Technical Assessor, Ministry of Health and Social Welfare, Caracas, Venezuela. *Adviser*.
- Dr. Fedor Grigorievitch Krotkov, Deputy Minister of Public Health, Member of the Academy of Medical Sciences, Moscow, Union of Soviet Socialist Republics. Representative.
- Dr. Melville Mackenzie, Principal Medical Officer, Ministry of Health, London, United Kingdom. Representative.
 - Mr. L. M. FEERY, Principal, General Register Office, London, United Kingdom. Alternate.
 - Dr. W. H. KAUNTZE, Chief Medical Adviser, Colonial Office, London, United Kingdom. Alternate.
 - Mr. R. Brain, Principal, Ministry of Health, London, United Kingdom. Adviser.
 - Air Vice-Marshal C. H. K. Edmonds, Assistant Secretary, Ministry of Health, London, United Kingdom. Adviser.
 - Dr. Percy Stocks, Medical Statistician, Office of the Registrar-General for England and Wales. Adviser.
 - Mr. F. A. Vallat, Assistant Legal Adviser, Foreign Office, London, United Kingdom. Adviser.
- Major C. Mani, Deputy Public Health Commissioner with the Government of India, New Delhi, India. Representative.
- Dr. Manuel Martinez Baez, Permanent Representative of Mexico to UNESCO, Paris, France. Alternate.
- Dr. Thomas Parran, Surgeon-General, Public Health Service, Washington, D.C., United States of America. Representative.
 - Dr. H. VAN ZILE HYDE, Senior Surgeon, Public Health Service, Washington, D.C., United States of America. Adviser.
 - Mr. Howard B. Calderwood, Consultant, Public Health Service, Washington, D.C., United States of America. *Adviser*.
 - Dr. James A. Doull, Chief of the Office of International Health Relations, Public Health Service, Washington, D.C., United States of America. Adviser.
- Dr. Geraldo H. de Paula Souza, Director of the Faculty of Hygiene and Public Health, University of São Paulo, Brazil. Representative.
- Dr. George Muir Redshaw, Chief Medical Officer, Australia House, London, England. Representative.
- Dr. Joseph N. Togba, Physician to the Liberian Government, Department of State, Monrovia, Liberia. Representative.

- Dr. C. VAN DEN BERG, Director-General of Public Health, Ministry of Social Affairs, The Hague, Netherlands. Representative.
 - Dr. W. A. TIMMERMAN, Director of the National Institute of Public Health, Utrecht, Netherlands. Alternate.
 - Mr. C. J. GOUDSMIT, Health Department, Ministry of Social Affairs, The Hague, Netherlands. Adviser.

The following were present as Observers:

UNITED NATIONS:

- Mr. A. B. Elkin, Assistant Director representing the Secretary-General in Geneva.
- Mr. Gilbert E. YATES, Secretary, Economic and Social Council.
- Dr. A. Jean Lucas, Chief of the General Research Section, Department of Trusteeship.

OFFICE INTERNATIONAL D'HYGIÈNE PUBLIQUE:

- Dr. M. T. Morgan, President of the Permanent Committee.
- Dr. L. M. GAUD, Président de la Commission des Finances et du Transfert.

PAN AMERICAN SANITARY BUREAU:

Dr. Aristides A. Moll, Secretary.

UNRRA:

Dr. Neville M. Goodman, Director of the Health Division, European Regional Office, London.

The following represented the Secretariat:

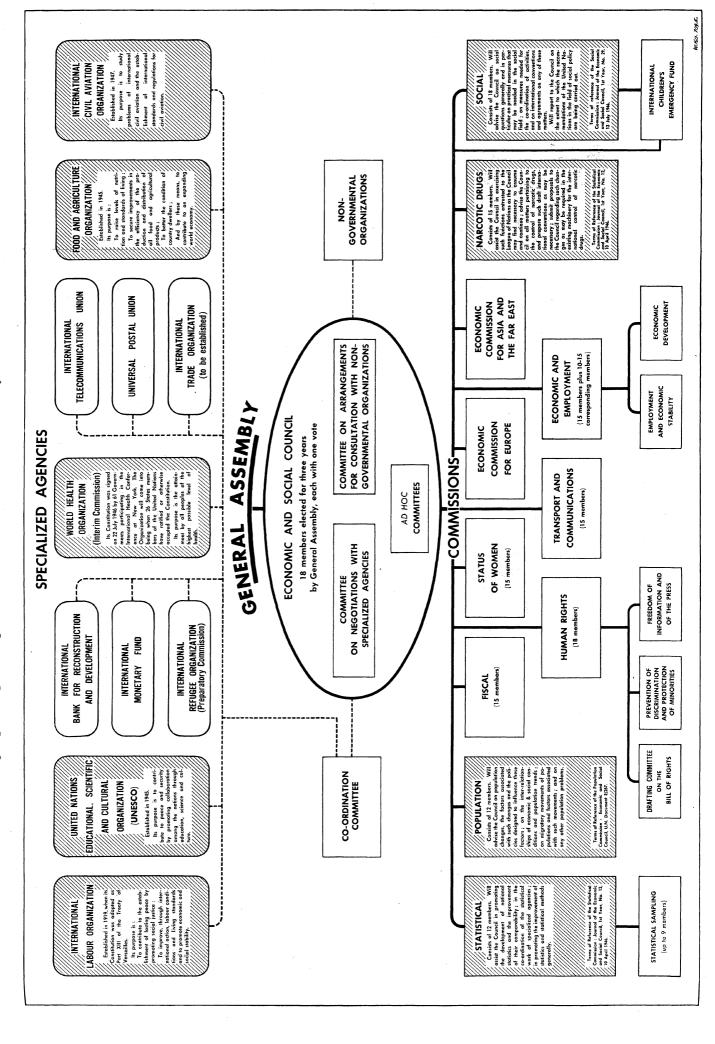
- Dr. Brock Chisholm, Executive Secretary.
- Dr. Yves M. BIRAUD, Deputy Executive Secretary.
- Dr. Raymond GAUTIER, Counsellor.

2000 A., 2000 F., 1000 Esp. 7/47. Imprimerie de « La Tribune de Genève ».

Annex III.

STRUCTURE OF SPECIALIZED AGENCIES AND OF THE SPECIAL COMMISSIONS OF THE ECONOMIC AND SOCIAL COUNCIL OF THE UNITED NATIONS

The large squares represent Agencies and Commissions whose fields of activity are related to Public Health.



CHRONICLE OF THE WORLD HEALTH ORGANIZATION

VOL I, No. 5-6

1947

ORGANIZATION

THIRD SESSION OF THE INTERIM COMMISSION

The Interim Commission held its third session ¹ at the Palais des Nations, Geneva, from 31 March to 13 April 1947, under the chairmanship of Dr. Andrija STAMPAR. The following is a summary of its work and that of its internal committees and expert committees, during the first quarter of 1947.

RELATIONS WITH THE UNITED NATIONS AND THE SPECIALIZED
AGENCIES

Among the questions to be dealt with by the World Health Assembly is that of the relationship between WHO and the United Nations and the specialized agencies; the importance of this has already been stressed (see WHO Chronicle, Vol. I, No. 3-4). The Interim Commission will submit a series of draft agreements for approval to the Assembly.

Negotiations were opened between the Secretariat of WHO and those of the United Nations, UNESCO, and FAO. Since the draft agreements to be concluded between WHO and the United Nations and that between WHO and UNESCO have been examined by the secretariats of those organizations, and as the exchanges of views between WHO and FAO are well advanced, it now rests with the

¹ See list of members present in Annex II, p. 97.

Interim Commission to begin direct negotiations with these organizations. To this end, a Sub-Committee on Negotiations with the United Nations was set up, consisting of representatives from China, the Netherlands, the United States of America and the Union of Soviet Socialist Republics. Another Sub-Committee is in charge of negotiations with UNESCO, and consists of representatives from Brazil, France, the United Kingdom and the United States of America. Lastly, there is a Sub-Committee on Negotiations with FAO, consisting of representatives from Australia, Mexico and Norway.

RELATIONS WITH NON-GOVERNMENTAL BODIES

A large number of non-governmental organizations working in the field of health have approached WHO with a view to establishing close relations.

The final choice of organizations with which relations are advisable will rest with the World Health Assembly. Its task will be facilitated by a preliminary selection made by the Interim Commission, which to this end has formed a Sub-Committee consisting of representatives from China, the United Kingdom and Venezuela, and whose task will be to consider all such requests which have been and will be made to WHO.

HEADQUARTERS OF THE ORGANIZATION

The final location of the headquarters of WHO will be determined by the first World Health Assembly. It is the Interim Commission's task to collect such data for the Assembly as will enable it to make a decision with full knowledge of the facts.

For this reason, the Interim Commission appointed, in November 1946, a Committee of five members to make studies regarding the location of the headquarters of the Organization, and gave it a number of criteria to observe. (See WHO Chronicle, Vol. I, No. 3-4, p. 58.)

During a meeting of the Committee held in April 1947, the representative from France proposed certain additional criteria. These criteria, which were approved by the Interim Commission, are:

- "1. Economic and social realities, not national or political conditions;
- "2. The necessity for the World Health Organization to have a definite seat at its disposal at the earliest possible date;
- "3. The importance of spending as little as possible on the construction of buildings and of conserving the resources available to the World Health Organization for direct activities to ameliorate the health of the peoples of the world;
- "4. The importance, especially for the peoples of countries devastated by the war, or in which health and sanitary conditions are especially bad, to reduce to a minimum the expenses involved in travel when representatives of the various nations have to be brought together to the central seat;
- "5. The importance of averting the risk that some nations, anxious to reduce their heavy burden of expenses, may cease to send technical representatives and have themselves represented solely by their local diplomatic agents."

The 67 Governments of the States invited to the New York Conference have been asked to state their views as to the location of WHO's Headquarters.

At the World Health Assembly, the Interim Commission will submit the necessary documents and recommendations, taking due note of the opinions expressed by the Governments, and also of the criteria stated above.

COMMITTEE ON PRIORITIES

Immediately it is formed, the Executive Board of WHO will have to consider health problems as a whole. In the meanwhile, it is the Interim Commission's duty first of all to pave the way for the future organization and then to co-operate in the finding of a solution to those health problems which cannot be deferred until the Executive Board comes into being.

Since the Interim Commission is confronted with a large number of medical and health problems, it has been necessary to set up a Committee on Priorities to determine those problems which cannot wait until the World Health Assembly is convened, and to classify them according to their importance and urgency. This Committee consists of representatives from Egypt, France, India, Mexico, Norway, the United Kingdom, the United States of America and the Union of Soviet Socialist Republics.

APPOINTMENT OF NEW MEMBERS TO THE COMMITTEE ON RELATIONS AND THE COMMITTEE ON HEADQUARTERS

The Interim Commission decided to appoint the representatives from China and the United Kingdom to the Committee on Relations and the representative from France to that on Headquarters.

FOURTH SESSION OF THE INTERIM COMMISSION

The Interim Commission will hold its fourth session at the Palais des Nations, Geneva, from 30 August to 13 September 1947. This session will be preceded by a meeting of the Committee on Administration and Finance, which will begin on 28 August 1947.

TECHNICAL AND MEDICAL ACTIVITIES

FIELD SERVICES

In the last issue of the *Chronicle*, reference was made to the Agreement signed between UNRRA and the Interim Commission of WHO in November 1946, whereby the health work of UNRRA would be carried on during 1947, on a reduced scale, by means of a grant of one-and-a-half million dollars transferred from UNRRA to the Interim Commission of WHO.

In principle, this work was to begin on 1 January 1947, in Europe and Africa, and on 1 April in China, and immediate steps were therefore taken to retain a nucleus of staff before their complete dispersal through the "run-down" of UNRRA. Early in January, Dr. N. M. GOODMAN, previously Director of the Health Division in the European Regional Office of UNRRA, was transferred to Geneva with a small staff as the Director of the Field Services Division which was to be responsible for carrying on this work. Dr. B. BORCIC, Chief of the Health Division of the UNRRA Mission in China, continued to have direct responsibility for the WHO Mission there from 1 April.

The countries receiving aid from UNRRA ¹ were immediately asked in what form they wished to receive aid from WHO. Except that funds would not permit medical or scientific supplies to be furnished—and the UNRRA supplies would still be coming in during at least the first part of the year—no restriction was placed on the form that such aid might take. The replies received were considered and budgetary allocations made by a Sub-Committee on Field Services Budget (UNRRA Funds) which met at Geneva from 17-20 February 1947: ² the Committee's decisions were confirmed by the Interim Commission at its third session in April.

Briefly, the aid requested fell under four heads: missions of technical experts, grants for fellowships or study tours, visiting

¹ Albania, Austria, Byelorussia, China, Czechoslovakia, Ethiopia, Finland, Greece, Hungary, Italy, Korea, Philippines, Poland, Ukraine and Yugoslavia.

² See Chronicle, Vol. I, No. 3-4, p. 55.

lecturers, and the supply of medical literature and periodicals. The present budget allocations for 1947 under these heads are approximately U.S. \$708,000 for Field Missions, \$483,000 for fellowships, \$30,000 for visiting lecturers and \$40,000 for medical literature. These figures include China, but they do not include the amounts in local currency paid by countries receiving missions for the local expenses of the missions, which total about \$381,000. Present activities under these heads can be summarized as follows:

Missions.

Missions, or a medical liaison officer and adviser, were continued or established in China, Ethiopia, Greece, Hungary, Italy and Poland. A small team is planned for Yugoslavia to continue the work in plastic surgery established in Belgrade by UNRRA.

By far the largest of the Missions is that in China. This was planned for 26 specialists, including 18 of teaching status, 3 epidemiologists for the control of communicable diseases, 2 experts in tuberculosis control and 2 orthopædists for the rehabilitation of the crippled. Some twenty-five of the above are now in the field, the bulk being divided between Shanghai and Nanking, but some staff are stationed in eight other centres, including those in Communist-controlled areas. Dr. B. Borčić, Chief of the Mission, is at present stationed in Shanghai.

Next in importance comes the Mission in Greece, with seven imported technical experts. The Greek anti-malaria campaign for 1947, in continuation of those in 1945 and 1946, is being assisted by two sanitary engineers—one being Colonel D. WRIGHT loaned by the Rockefeller Foundation—and an aircraft mechanic. So far the campaign is going very well, 2,315 villages having received residual spraying with DDT by 31 May, as compared with 4,800 in the entire 1946 programme, and 17 specially fitted Stearman biplanes being in use for the spraying of marshy areas.

A WHO tuberculosis expert is assisting the Ministry of Health in the uphill struggle against this disease, so greatly increased during the war, and an X-ray technical adviser is proving of great value in setting up and maintaining the numerous X-ray plants sent in by UNRRA.

A nursing adviser, in addition to general assistance on nursing policy, has carried on a very successful course in tuberculosis nursing for some 150 practical nurses in two sanatoria.

The Chief of Mission is Dr. J. M. VINE, previously Director of the Health Division in the UNRRA Mission to Greece and before that UNRRA Medical Liaison Officer to the Governments of Belgium and Luxemburg.

Special mention was made in the Agreement between UNRRA and the Interim Commission of the value of the basic training-courses for health personnel in Ethiopia. These are being continued by a small Mission of two doctors, two nurses and a sanitary inspector stationed in Addis Ababa. Assistance is also given to the Ethiopian Department of Health in the control of epidemics and other public health problems. The Chief of Mission is Dr. D. A. MESSINEZY, a Greek trained in public health in the United States.

In Rome, WHO has two medical officers who are assisting the Italian Health Authorities in the preparation and execution of large health projects financed out of the so-called Lira Fund—i.e., the funds derived from the sale of UNRRA supplies. In Budapest and Warsaw, WHO has medical liaison officers, and in Vienna the IRO medical officer in charge of the health of Displaced Persons also acts officially as WHO agent.

Fellowships.

A most important part of the work of the Field Services Division is concerned with the arrangements for some 180 doctors and other health personnel to travel abroad and study, for periods of two to twelve months, recent advances in their specialities. Dr. J. Vesely, Deputy Director of the Division and late Chief of the Division of Preventive Medicine in the Czechoslovak Ministry of Health, is in special charge of this work, the permanent value of which in raising the level of public health and medical practice in occupied and war-devastated countries needs no comment.

The candidates are selected by the Health Authorities of the countries concerned and preference is given to those in Public Services. In view of the special problems of medical care of children, the Interim Commission has recommended that 10% of fellowships from each country should be in the field of pædiatrics. All fourteen countries concerned (no reply has been received from Albania) have asked for fellowships—Czechoslovakia and Finland exclusively of any other form of aid—and some 85 Fellows have already been accepted and will shortly be in the field. The countries chosen for

study include United States of America, United Kingdom, Sweden, Switzerland, France, Canada, Netherlands, Denmark, Union of Soviet Socialist Republics, Poland, Czechoslovakia and Luxemburg.

Visiting Lecturers.

Following the successful visit to Czechoslovakia and Poland last year of a group of American professors organized by the Unitarian Service Committee of New York and UNRRA, arrangements have been made for another similar group, made more international by the addition of two Swiss members, to visit and lecture in the Universities of Austria this summer. A grant of \$8,000 has been made by the Interim Commission to assist this project. Particulars of the subjects requested by the other countries which have asked for visiting lecturers—i.e., Italy and Poland, are awaited.

Medical Literature and Periodicals.

Eight countries have had considerable sums allotted, at their request, for the supply of medical literature, and smaller amounts have been allocated to a further three countries. Arrangements have been made for the purchase of the books and periodicals required. To date, detailed requests in any quantity have been received and met only for Yugoslavia.

The purpose underlying the Field Services programme for 1947 can best be shown by a quotation from the Report of the Sub-Committee on Field Services budget, referred to above.¹

"As a guiding principle in developing the budget, the Sub-Committee bore in mind the views of the Council of UNRRA in transferring these funds and of the Interim Commission in accepting them, that a sudden, complete cessation of UNRRA health activities would endanger world health, in that there still exist many hazards to the health of the world resulting from the ravages of war. Allocations were made on the one hand to provide for the maintenance of minimum essential mission activities in certain war-devastated countries, to be reduced as rapidly as is consistent with the protection of world health, and on the other hand for the technical training of nationals of such countries. It was particularly recognized by the Sub-Committee that the present dangerous shortage of physicians in these countries would

¹ Document WHO.IC/59.

become greater unless immediate steps were taken to assist in strengthening medical education. It was the general purpose of the Sub-Committee to bridge the gap between the cessation of UNRRA health activities and the time when the permanent World Health Organization could review the health needs of the world as a whole."

BIOLOGICAL STANDARDIZATION

Eight experts to form the nucleus of a future Committee on Biological Standardization have been appointed.¹

In December, a note reviewing the position regarding existing international standards and suggesting new substances for standar-dization was circulated to these experts by the Secretariat. The main emphasis was laid on the need for taking up the question of vaccines, particularly formol toxoids, and for establishing international scales for folic acid, biotin and streptomycin. Other subjects mentioned were: tetanus and perfringens antitoxins, antivenenes, anti-anthrax and anti-typhoid sera, smallpox and yellow fever vaccine, B.C.G., tuberculin, neoarsphenamine, digitalis lanata, vitamins A, B², D³ and K, hormones of pituitary anterior lobe, and catgut.

There was general agreement on the need to give first place to the standardization of toxoids—and especially diphtheria prophylactic. New proposals were made: the inclusion of whooping-cough vaccine among the antigens to be studied and the adoption at the earliest possible moment of standard sera for the various blood groups.

The general opinion favoured the setting-up of standards for folic acid, biotin and streptomycin.

A meeting of the Expert Committee was arranged for June 1947, at Geneva.

Unification of Pharmacopæias

In the field of drugs, a unified system of nomenclature, providing that the same name should represent in all countries a preparation

¹ For list of Members of the Expert Committee on Biological Standardization, see Annex I, p. 95.

of the same strength and composition, is an urgent need which could best be fulfilled by the establishment of an international pharmacopæia. In the preface to the *French Codex* of 1866, Jean-Baptiste Dumas had already shown how advantageous an international pharmacopæia would be. Since then, this idea has steadily gained ground, the first Convention for the Unification of Pharmacopæial formulæ for Potent Drugs dating from 1906.

In 1929, a second International Agreement was signed at Brussels by 26 countries. Article 35 of this Agreement stipulated that the Belgian Government should enter into negotiations with the League of Nations for the constitution of a Permanent Secretariat for Pharmacopæias, the Belgian Pharmacopæia Commission being provisionally entrusted with the work of the proposed Secretariat.

The question of drawing up an international pharmacopæia was also considered in 1935 by the International Federation of Pharmacy, which had contemplated the creation of a central Bureau for Pharmacopæias.

In 1937, however, the negotiations between the Belgian Government and the League of Nations resulted in the setting-up by the latter of a Technical Commission of Pharmacopæial Experts which undertook the preparation of a draft Agreement dealing with: (a) General Rules on Nomenclature, (b) Usual and Maximal Doses, and (c) Monographs on Important Drugs.

At its first session (May 1938), the Commission realized that the list of drugs appearing in the Brussels Agreement required to be extended and, after bringing the number up to 272, it selected 157 substances for immediate study, the drafting of monographs on these being divided among its members.

At its second session (May 1939), the Commission examined 73 draft monographs, adopted 47, drew up a list of usual doses and decided what laboratory research was still required to solve difficulties in the drafting of the monographs.

The war prevented the third meeting, scheduled for 1940, from taking place. The British and American Members of the Commission, however, were able to continue revising the monographs, and in

¹ This Agreement was concluded on the basis indicated in the Final Protocol signed 29 September 1925 after the Brussels Conference. See the International Agreement revising the Agreement of 1906 respecting the Unification of Pharmacopeial Formulæ for Potent Drugs, *Treaty Series* No. 47 (1939), His Majesty's Stationery Office, London.

1945 they accepted the responsibility for issuing an Interim Report. One hundred copies of this Report were sent to the Belgian Pharmacopeial Commission on 20 March 1946, with a view to their distribution to the National Pharmacopeial Commissions.

A plan of work for the future would include the revision of those monographs which have not yet been adopted and the preparation of others for the substances listed in Part 5 of the Interim Report. To these should be added the sulphonamides, the antibiotics and the synthetic anti-malarials.

At its third session, the Interim Commission decided to set up an Expert Committee to carry on the work of the Technical Commission of the League of Nations.¹

SETTING-UP OF AN EXPERT COMMITTEE ON TUBERCULOSIS

At the third session of the Interim Commission, held in Geneva in April 1947, it was decided to set up an Expert Committee on Tuberculosis. The function of this Committee will be to make recommendations to the Interim Commission, concerning the role which may be played by the World Health Organization in combating tuberculosis throughout the world. A small Committee was appointed to make recommendations until such time as the Organization enunciates general principles. It is anticipated, however, that, if the proposals are accepted, the Committee will ultimately be enlarged to ensure wide geographical representation. The first meeting of the Expert Committee was held in Paris on 30 July 1947, and the following attended: Dr. Herman HILLEBOE, Washington, D.C., Director of the Tuberculosis Division of the United States Public Health Service; Dr. Johannes Holm, Director of the Tuberculosis Division of the State Serum Institute, Copenhagen, Denmark; and Dr. P. D'ARCY HART, Medical Research Council, London. The Union of Soviet Socialist Republics was invited to send a representative; but no appointment has yet been made. Dr. J. B. McDougall (member of the Interim Secretariat of the World Health Organization) is the Secretary of the Committee.

¹ For names of members, see Annex I, p. 96.

POST-VACCINAL ENCEPHALITIS IMMUNITY REACTION AFTER SMALLPOX VACCINATION

Discussions on both of the above subjects took place in Paris at the Office International d'Hygiène Publique during the April-May and October sessions of its Permanent Committee in 1946. During the October session, papers on post-vaccinal encephalitis were read by Dr. P. Vollenweider (Switzerland) and Dr. C. van den Berg (Netherlands) and a statement was made on the incidence of this condition in England and Wales during the Second World War years by Dr. Melville Mackenzie. At the same session, papers on the immunity reaction after smallpox vaccination were read by Dr. P. G. Stock (Union of South Africa) and Dr. G. Stuart (UNRRA, London).

No definite conclusions having been reached by the Permanent Committee in respect of either occurrence, both subjects were referred by that Committee for further investigation to the Interim Commission of the World Health Organization, which, at its third session in March-April 1947, considered, in its Epidemiology and Quarantine Committee, what steps should be taken to throw further light on the problems.

In its Report dated 8 April 1947, the Epidemiology and Quarantine Committee recorded its decision to ask the Interim Commission's Secretariat (a) "to amplify and circulate to governments the information on post-vaccinal encephalitis set out in document WHO.IC/EQ/4" (which summarized the papers read and the statement made during October 1946 in Paris) and (b) "to request governments to express their views on the value to be attached to the immunity reaction in connexion with vaccination against smallpox and their reasons for holding these views."

The reasons underlying the present investigations are briefly as follows:

1. Post-vaccinal encephalitis.

Here the object is to determine incidence of the complication in its relation not only to the number of vaccinations performed among the several age groups but also to the method of vaccination employed. Elucidation is also sought of the factors responsible for the in-

equality of geographical distribution not only throughout the world but also regionally within affected countries.

2. Immunity reaction after smallpox vaccination.

The value of this "immune reaction" has been questioned on two grounds:

- (i) The existence of persons who, without being immune to living virus, react to heated lymph in a manner which may closely simulate the reaction of immunity and thus lead to mistaken readings;
- (ii) The existence of others who are immune to vaccinia virus on the evidence of lack of response to repeated vaccinations but do not show a reaction of immunity.

There are reasons, therefore, for suggesting that some alteration in the International Certificate of Vaccination against smallpox would be advisable because therein the "reaction of immunity" is accepted as valid, whereas no provision is made for lack of susceptibility—indeed it is stated "A certificate of no reaction will not be accepted".

It is with a view to the ultimate revision, where necessary, of the International Certificate that the investigation now being conducted is primarily concerned.

WORLD PRODUCTION OF INSULIN

The supply of insulin in the world market threatens to become insufficient in the near future, unless steps are taken to prevent this.

During the past two years it has been difficult, in some parts of the world at any rate, to obtain sufficient supplies of insulin. As diabetes is now diagnosed much earlier and more frequently, and as the number of diabetics kept alive by means of appropriate diets and treatment is growing, there is every reason to expect a greatly increased demand. Grave doubts have been expressed as to the adequacy of the present methods of obtaining raw material for insulin and of producing it.

Faced with this important problem, the Executive Secretary has drawn the attention of the Interim Commission to the fact that, if energetic measures were to be taken before the insulin shortage became really acute, the Commission should be in possession of

complete information concerning the quantity of insulin produced and consumed in each country. He therefore suggested that the health administrations of each country be asked for information on the subject and that the Commission reconsider the matter when such information had been received.

INFLUENZA

The representative from the Netherlands emphasized the importance and urgency of the influenza question. Indeed, an outbreak of pandemic influenza in the near future is a by no means imaginary danger; and it might be possible, according to the member for the Netherlands, to prevent the spread of the disease by means of prophylactic immunization, and by means of modern therapy, to obviate complications and also to reduce the number of fatal cases. To this end, he proposed that a small Committee be appointed to carry out the necessary preparatory work.

The Interim Commission considered that, before appointing the Expert Sub-Committee suggested, a certain amount of information now lacking should be collected concerning the possibilities of a large-scale struggle against influenza. The Executive Secretary was also asked to send an observer to attend the Fourth International Congress on Microbiology at Copenhagen in July 1947.

CANCER STATISTICS

From 3-5 September 1946, a Conference on Cancer Statistics was held at the University of Copenhagen, which transmitted to the Interim Commission a memorandum requesting the setting-up of an international organization to collect and systematize the fullest possible statistics on cancer. This proposal was submitted in detailed form to the Commission, and will be examined at its next session.

SCHISTOSOMIASIS

Schistosomiasis claims a large number of victims in hot climates; it is a parasitic disease which in those regions is becoming so serious that the member for Egypt considered that the World Health Assembly should, at its very first meeting, discuss means to diminish

¹ Document WHO.IC/61 S.

its frequency. The representative from Egypt has undertaken to prepare a detailed statement on the approach to this problem.

ALCOHOLISM

Dr. CAVAILLON drew the attention of the Interim Commission to the problem of the world-wide increase in alcoholism. Following a recommendation by him, the Commission decided to give further study to this question and Dr. CAVAILLON has undertaken to prepare a memorandum on the problem to be submitted to the fourth session.

PUBLICATIONS

When the World Health Organization reaches its definitive state, it will publish a certain number of periodicals and other documents for those concerned with its work. These publications will be of a scientific, documentary or informative character and will not only meet WHO's statutory obligation to the Office International d'Hygiène Publique and to the Health Organisation of the League of Nations, but they will also keep the medical profession informed of its various activities, and of scientific problems of general interest.

In view of the fact that, even during the preparatory period, several of these publications had to appear in conformity with statutory obligations, the Secretariat submitted to the Interim Commission a comprehensive programme enabling the latter to choose, from the publications proposed, those that were to appear during the present transition period. The following were selected:

Bulletin of the World Health Organization.

This publication replaces the "Bulletin of the Health Organization of the League of Nations" and the "Bulletin of the Office International d'Hygiène Publique". It will carry articles of a scientific and technical nature on subjects connected with public health, and reports of the technical committees of WHO. From 1948, the Bulletin will appear monthly in English and in French. Only two numbers will be published during 1947.

Digest of Health Legislation.

The Bulletin of the Office International d'Hygiène Publique contained a section on health legislation which was extremely useful

to administrations. This section will be continued in the form of a *Digest of Health Legislation* which will appear quarterly. This digest will appear bound in one volume or in the form of sets of separate articles under one cover, to enable them to be classified by subject-matter.

It will contain reproductions or extracts from national legislation and regulations dealing with public health and related subjects (social legislation, etc.).

Weekly Epidemiological Record.

The duty to supply health administrations with very recent epidemiological information, for the application of the Conventions of 1926, 1933, 1938 and 1944, is a legacy of the Office International d'Hygiène Publique and of UNRRA, and calls for the publication of a Weekly Epidemiological Record. This Record will carry on the weekly epidemiological publications of the Office International d'Hygiène Publique 1 and the League of Nations 2 as well as the fortnightly publications of UNRRA.3

This Epidemiological Record, intended especially for national health administrations and the sanitary services at ports and frontiers, will be bilingual (French and English) and will carry notifications concerning diseases that are, in the terms of the Conventions, described as "pestilential" (cholera, plague, yellow fever, typhus fever and smallpox), as well as all other information concerning the application of these Conventions.

Official Records of WHO.

Verbatim reports, minutes and the main documents dealing with meetings of the different bodies of the WHO will be published regularly in the *Official Records*, which will appear in English and in French.

¹ (a) Communiqué de l'Office International d'Hygiène Publique, published in the Weekly Epidemiological Record of the League of Nations, 1928-1944.

⁽b) Bulletin provisoire de l'OIHP (mimeographed), March 1940-December 1946.

⁽c) Bulletin de l'Office International d'Hygiène Publique, 1909-1946.

² (a) Weekly Epidemiological Record, 1 April 1926-29 August 1946.

⁽b) Epidemiological Report, 1922-1940.

 $^{^{3}}$ Epidemiological Information Bulletin (UNRRA), fortnightly, January 1945-December 1946.

Epidemiological and Vital Statistics Report.

This monthly report contains statistics on notifiable infectious diseases (with the exception of the "pestilential diseases" which are notified in the Weekly Epidemiological Record), and on vital statistics in general.

The first number, dated June 1947, gives detailed statistical information regarding dysentery, typhoid and paratyphoid fevers throughout the world.

MEDICAL STATISTICS

Meeting held at Ottawa, Canada, of the Expert Committee for the Preparation of the Sixth Decennial Revision of the International Lists of Diseases and Causes of Death.

"Classification is fundamental to the quantitative study of any phenomenon. It is recognized as the basis of all scientific generalization and is therefore an essential element in statistical methodology. Uniform definitions and uniform systems of classification are prerequisites in the advancement of scientific knowledge. In the study of illness and death, therefore, a standard classification of disease and injury for statistical purposes is essential." ¹

In 1893, numerous States adopted for their statistics of causes of death an International List proposed by Jacques Bertillon. This was brought up to date every ten years by a series of conferences which were called at Paris by the French Government. The fifth and last of these was held in 1938. The International Health Conference, convened at New York in 1946, entrusted WHO with the task of preparing the next decennial revision and of establishing an international list of causes of morbidity, which has now become indispensable to medicine. For not only does the Constitution of WHO ² lay down that it shall establish international lists of diseases and causes of death, which shall be submitted to the World Health Assembly for its approval; but also the arrangement for the setting-up of the Interim Commission states that this Commission will have

¹ From the Introduction, "International Statistical Classification of Diseases, Injuries and Causes of Death" (WHO.IC/M.S.1).

² Art. 2, para. s) and Art. 21, para. b).

to "review existing machinery and undertake such preparatory work as may be necessary in connection with:

- "(1) The next decennial revision of the International Lists of Causes of Death; and
- "(2) The establishment of International Lists of Causes of Morbidity."

To meet these statutory obligations, the Interim Commission decided, at its second session, held in November 1946, to set up an Expert Committee: the International Committee for the Preparation of the Sixth Decennial Revision of International Lists of Diseases and Causes of Death.¹

The terms of reference of the International Committee were defined by the Interim Commission as follows:

- (a) To review the developments as regards morbidity and mortality classification which have taken place since the Fifth Decennial Revision in 1938;
- (b) To formulate proposals to be submitted through the Interim Commission to governments;
- (c) To consider suggestions from governments and agencies interested in the problem of morbidity and mortality classification;
- (d) To prepare recommendations for the Sixth Decennial Revision of International Lists of Diseases and Causes of Death.

It had been realized from the beginning that, in facing this task, the International Committee would have the advantage of the very large amount of preparatory work accomplished by the *United States Committee on Joint Causes of Death*. This Committee had been appointed by the Secretary of State of the United States in compliance with a resolution of the Fifth International Revision Conference in 1938, and consisted of 18 experts from the United States, Canada, the United Kingdom, as well as a representative of the Health Section of the League of Nations. Its Chairman was Dr. Lowell J. REED, Professor of Vital Statistics and Vice-President of Johns Hopkins University, Baltimore, U.S.A.

The United States Committee decided that, before taking up the matter of joint causes of death, it might be well to consider

¹ For the membership of this Committee, see Annex I, p. 95.

classification from the point of view of morbidity and mortality, since the joint cause problem belongs to both types of statistics.

In approaching the problem of morbidity classification, the Committee acted upon another resolution of the Fifth Decennial Conference, which recommended that "the various National Lists in use should, as far as possible, be brought into line with the detailed International List of Causes of Death." With this objective in mind, the United States Committee, utilizing the experience in morbidity classification accumulated in the last decade in Canada, the United Kingdom and the United States, and keeping to the framework of the International List, prepared, in a series of working sessions, a single classification suitable for both morbidity and mortality statistics.

The United States Committee presented the results of its work in the "Proposed Statistical Classification of Diseases, Injuries and Causes of Death", consisting of two parts:

I. Introduction and List of Categories. — This list gives the general structure of classifications and the names of categories into which the different causes of morbidity and mortality will be grouped.

II. Tabular List of Inclusions.

This document was then submitted for criticism and review to various agencies and individuals in Canada, the United Kingdom and the United States. In the United Kingdom the Minister of Health appointed for this purpose a special investigating body: the Medical Advisory Committee on the Sixth Decennial Revision of the International List of Causes of Death.

After making various modifications suggested to it, the United States Committee, in March 1947, approved a final draft of the proposed classification.

The work of preparing the Sixth Revision of the International Lists was taken over, in that same month, by the International Committee of WHO, which met at Ottawa under the chairmanship of Dr. P. Stocks, and worked regularly in combined meetings with the United States Committee. Twenty-two meetings were held, during which the "Project" was examined and discussed. Some further changes were made, and it was then adopted under the title of "International Statistical Classification of Diseases, Injuries and Causes of Death". The international Committee summarized

its work and deliberations during the session in the following statement:

- (i) There is an ever-increasing need for a uniform classification of causes of sickness similar to the International List of Causes of Death.
- (ii) A single statistical classification applicable to both causes of sickness and causes of death would permit parallel presentation of morbidity and mortality statistics.
- (iii) In order to achieve comparable morbidity and mortality statistics there should also be available a uniform list of inclusion terms for each title of the list.
- (iv) There should be agreement on condensed forms of the list suitable for comparative tabulations of morbidity and mortality statistics by such characteristics as age and geographical region.

The International Committee recommended that the List be transmitted to all governments for consideration, and that they be asked to communicate their criticisms. The International Committee further recommended that the Provisional form of list of inclusions be circulated to individuals for review and suggestions as to additional terms.

The second session of the International Committee will be held in Geneva in October 1947, when the criticisms received from governments and individuals will be discussed, as well as problems connected with the application of the classification to morbidity and mortality data.

SANITARY CONTROL OF THE MECCA PILGRIMAGE

Meeting of the Expert Sub-Committee for the Revision of the Pilgrimage Clauses in the International Sanitary Conventions (Alexandria, 16-26 April 1947).

Since the great cholera epidemic of 1866 which claimed more than 200,000 victims in Europe where it was imported by pilgrims returning from Mecca, the Sanitary Conventions have included special provisions for the supervision of this pilgrimage. When, in 1944, it was necessary to modify certain clauses of the 1926/38 Conventions

then in force, 1 no changes were made in Part III of these Conventions, which deals with the pilgrimage, since the latter has been practically brought to a standstill by the war. Now that it has been resumed, the Interim Commission of the World Health Organization has found it necessary to consider improvements to be made in this field; and to this end it convened an Expert Committee at Alexandria (16-26 April 1947).

Revision of the clauses dealing with the Moslem pilgrimage had been the subject of discussion since October 1928 but had not so far been effected.

Conferences held at Beirut and Paris, in 1929, 1930 and 1931 sought to give satisfaction to the various proposals or suggestions which had been laid before the Permanent Committee of the Office International d'Hygiène Publique, Paris—the sole international body at that time empowered to deal with matters affecting the International Sanitary Conventions. In October 1938, a conference held at Paris authorized, in the field of public health, as a result of the abolition of the then existing Capitulations, the substitution of the Egyptian Sanitary Administration for the Sanitary Maritime and Quarantine Board of Egypt. The text of certain Articles in Part III was thereby modified in form, but in substance remained unchanged.

On this occasion, however, the representative of Saudi Arabia made observations and suggestions of a fundamental nature, and in 1939, the delegate for the United Kingdom forwarded certain preliminary proposals. These documents were referred by the Permanent Committee of the Paris Office to its Pilgrimage Commission, but the outbreak of war interrupted the preparatory work of that Commission.

On the resumption of the meetings of the Paris Office in April 1946, the delegate for Egypt, supported by the delegates for Saudi Arabia and Syria, presented new proposals, which were referred by the Paris Office to the international organization destined to replace it.

Thus the matter became the concern of the Interim Commission and, as it was urgent, the Commission set up an Expert Sub-

¹ International Sanitary Convention, signed at Paris on 21 June 1926, modified by the International Sanitary Convention signed at Paris on 31 October 1938 [Bulletin de l'Office International d'Hygiène Publique, Vol. XVIII (1926), p. 1221, No. 11, and ibid., Vol. XXXI (1939), p. 189, No. 2 (in French)].

Committee to study the question of revision. A meeting of the experts was convened on 16 April 1947 at Alexandria, where the Egyptian Government had expressed a desire that the first meeting should be held.

During its March-April session 1947, the Interim Commission, on the advice of its Epidemiology and Quarantine Committee, had approved the following terms of reference for the Expert Sub-Committee:

- (a) The need for taking, in respect of all pilgrims leaving their country of origin, adequate measures to ensure individual and collective protection in the country of origin, transit countries and countries of destination against the introduction and dissemination of disease (inoculations and vaccinations, disinfection, disinsectization, biological examinations, etc.) and the need for official certification that such measures have been adequately carried out, both in the country of origin and in the country of destination.
- (b) To determine whether the sanitary installations and equipment of the Hedjaz and transit ports are capable of carrying out adequate measures and, if necessary, to make recommendations
- (c) By what Sanitary Authority is the pilgrimage to be declared "clean" or "infected"?
- (d) The proposals relating to the Red Sea Stations referred to in the Conventions now in force.
- (e) Sanitary measures to be taken in regard to pilgrims travelling by land or air.

The expert members of the Sub-Committee appointed by the Interim Commission were:

- Dr. P. L. M. GAUD, Office International d'Hygiène Publique, Paris;
- Lieut.-Col. C. Mani, I.M.S., Deputy Public Health Commissioner with the Government of India.
- Dr. M. T. MORGAN, Chief Medical Officer, Port of London Health Authority;
- Professor J. J. VAN LOGHEM, University of Amsterdam;
- Dr. Wasfy OMAR, Director of the Pan-Arab Regional Health Bureau;

Dr. Yehia NASRI, formerly Director-General of Health, Saudi Arabia.

The Secretariat comprised Dr. G. STUART, Chief of Service, and M. G. DE BRANCION, Technical Officer—both of the Interim Commission's Secretariat. During the meeting the following were appointed Advisers:

Professor Khall Bey, Under-Secretary of State for Quarantine, Egypt;

His Excellency Youssef Yassine, Minister, Saudi Arabia;

Dr. E. D. PRIDIE, Health Counsellor to the British Embassy, Cairo:

Dr. A. E. LORENZEN, Director of Medical Services, Anglo-Egyptian Sudan.

Dr. M. T. Morgan was unanimously elected Chairman and Dr. P. L. M. Gaud rapporteur.

The session of the Sub-Committee lasted from 16 to 26 April 1947 and comprised 16 meetings. During this period, between 20 and 23 April, the Sub-Committee left Alexandria in order to make a short journey by air to the Hedjaz, where it had an opportunity of investigating on the spot the hospital possibilities of Jeddah—the transit port of all pilgrims arriving by sea—as well as the operation of the quarantine services there and the position in regard to the work of bringing in a potable water supply to the same town—work already in course of execution.

The work of the Sub-Committee permitted the drawing-up of a new text revising the provisions contained in Part III of the 1926 Convention—a text intended to form an annex to the future general Convention.

The provisions adopted by the Sub-Committee had for their principal aims the following:

- (a) To secure the sanitary defence not only of western countries but of the Hedjaz itself against the danger of spread of epidemic disease, consequent on the movement of pilgrims of so diverse origin.
- (b) To save the pilgrims from undergoing unnecessary or obsolete formalities, such as periods of observation, the value of which is questionable.

- (c) To improve the condition of pilgrims' transportation, particularly by the installation of berths on board ship.
- (d) To envisage the making of special arrangements for pilgrims travelling by air or by land.

Generally speaking, the Sub-Committee has endeavoured to reduce to the minimum consistent with security the measures for the protection of the health of the pilgrims.

The revised text has been codified and, after having been circulated to Governments for their observations, will be considered by the Interim Commission.

Annex I.

INTERNAL COMMITTEES

ADMINISTRATION AND FINANCE

Chairman: Dr. C. VAN DEN BERG (Netherlands).

Canada Ukrainian S.S.R.
China United Kingdom

France United States of America

Mexico Yugoslavia

Netherlands

Sub-Committee on Field Services Budget (UNRRA Funds).

Chairman: Dr. C. VAN DEN BERG (Netherlands).

Canada
China
Netherlands
Ukrainian S.S.R.
United States of A

United States of America

Yugoslavia

HEADQUARTERS

Chairman: Lieut.-Colonel C. MANI (India).

Canada India
Egypt Mexico
France Norway

EPIDEMIOLOGY AND QUARANTINE

Chairman: Dr. Melville MACKENZIE (United Kingdom).

Brazil Peru

China Union of Soviet Socialist Republics

Egypt United Kingdom

France United States of America

India Yugoslavia

Liberia

PRIORITIES

Chairman: Dr. M. MARTINEZ BAEZ (Mexico).

China Norway

Egypt Union of Soviet Socialist Republics

France United Kingdom

India United States of America

Mexico

INTERNAL COMMITTEES (continued).

RELATIONS

Chairman: Dr. Aly Tewfik Choucha Pacha (Egypt).

Australia

Norway

Brazil China Union of Soviet Socialist Republics

Egypt

United Kingdom

Mexico

United States of America

Netherlands

Venezuela

with the United Nations.

Chairman: Willem A. TIMMERMAN (Nether-

lands).

China Netherlands

Union of Soviet Socialist Republics

United States of America

with the Food and Agriculture Organization

(FAO).

Australia

Mexico

Norway

Sub-Committees onNegotiations

with the Pan American Sanitary Organization.

Chairman: Dr. A. GABALDÓN (Venezuela).

Brazil

Mexico

United States of America

Venezuela

with UNESCO.

Brazil

France

United Kingdom

United States of America

with the Office International d'Hygiène Publique.

Chairman: Dr. C. VAN DEN BERG (Netherlands).

Australia

Mexico

Netherlands

with Non-governmental Organizations.

Chairman: Dr. Melville Mackenzie (United Kingdom).

China

United Kingdom

Venezuela

Sub-Committee on

Relations

EXPERT COMMITTEES

EXPERT COMMITTEE ON BIOLOGICAL STANDARDIZATION

Professor E. Grasset (Switzerland). Dr. A. A. Miles (United Kingdom). Dr. J. Ørskov (Denmark). Lieut.-Col. Sir Sahib Sing Sokhey (India). * Dr. W. TIMMERMAN (Netherlands). Dr. J. TREFOUËL (France). Dr. M. V. VELDEE (United States). Soviet Expert (not yet appointed).

Secretary: Dr. R. GAUTIER, Counsellor of the Interim Commission.

EXPERT COMMITTEE FOR THE PREPARATION OF THE SIXTH DECENNIAL REVISION OF THE INTERNATIONAL LISTS OF DISEASES AND CAUSES OF DEATH

Dr. Julie Backer (Norway).

Professor S. T. Bok (Netherlands).

Dr. Dario Curiel (Venezuela).

Dr. W. Thurber Fales (United States).

Professor Martin Kacprzak (Poland).

* Dr. Percy Stocks (United Kingdom). Professor G. Wyllie (Canada). Soviet Expert (not yet appointed). French Expert (» » »).

Secretaries: Dr. Maria Caketova, member of the Secretariat of the Interim Commission, and Mr. J. T. Marshall, Federal Bureau of Statistics, Canada.

EXPERT COMMITTEE ON MALARIA

Professor Dr. Mihai Ciuca (Roumania).
* Dr. Arnoldo Gabaldón (Venezuela).

Brig.-General Dr. N. Hamilton Fairley (United Kingdom).

Dr. Paul F. Russell (United States). Soviet Expert (not yet appointed).

Secretary: Dr. E. J. PAMPANA, member of the Secretariat of the Interim Commission.

EXPERT COMMITTEE ON TUBERCULOSIS

Dr. P. D'ARCY HART (United Kingdom). Dr. Herman E. Hilleboe (United States).

* Dr. Johannes Holm (Denmark). Soviet Expert (not yet appointed).

Secretary: Dr. J. B. McDougall, member of the Secretariat of the Interim Commission.

^{*} Chairman of the Committee.

EXPERT COMMITTEES (continued).

EXPERT COMMITTEE ON QUARANTINE

Dr. DUJARRIC DE LA RIVIÈRE (France). Dr. G. L. DUNNAHOO (United States). Dr. G. D. HEMMES (Netherlands). Lieut.-Col. C. Mani (India). Dr. W. W. Yung (China).

Brazil, Egypt and the Union of Soviet
Socialist Republics have each been
asked to nominate a member to the
Committee.

Secretary: Dr. G. STUART, Head of the Notifications and Quarantine Service of the Interim Commission.

Expert Sub-Committee on Yellow Fever.

This Panel is now in process of formation, the nomination of seven experts—three conversant with yellow-fever vaccine production and four with field work and delineation of yellow-fever areas—having been sought from several countries.

EXPERT COMMITTEE ON HABIT-FORMING DRUGS

Dr. J. BOUQUET (France).

Dr. P. O. Wolff (Argentina).

Dr. H. P. CHU (China).

Dr. J. R. Nichols (United Kingdom).

Dr. Nathan EDDY (United States).

EXPERT COMMITTEE FOR THE REVISION OF EXISTING INTERNATIONAL SANITARY CONVENTIONS

Will be set up by the Interim Commission at its fourth session and will consist of not more than nine members.

Expert-Sub-Committee for the Revision of the Pilgrimage Clauses in the International Sanitary Conventions.

Professor J. J. VAN LOGHEM (Netherlands).

Lieut.-Col. C. MANI (India).

Dr. M. T. Morgan (United Kingdom).

Dr. Yehia Nasri (Saudi Arabia).

Dr. Wasfy OMAR (Egypt).

Dr. P. L. M. GAUD (France).

Secretaries: Dr. G. STUART and M. G. DE BRANCION, members of the Secretariat of the Interim Commission.

EXPERT COMMITTEE ON UNIFICATION OF PHARMACOPŒIAS

Professor H. BAGGESGAARD-RASMUSSEN (Denmark).

Professor I. R. FAHMY (Egypt).

Dr. E. FULLERTON COOK (United States). Dr. C. H. HAMPSHIRE (United Kingdom).

Professor R. HAZARD (France).

Annex II.

LIST OF PARTICIPANTS AT THE THIRD SESSION OF THE INTERIM COMMISSION

- Dr. Andrija Stampar, President of the Yugoslav Academy of Sciences and Arts, Professor of Public Health, Director of the University of Zagreb, Yugoslavia. *Chairman. Representative*.
- Dr. Aly Tewfik Choucha Pacha, Under-Secretary of State, Ministry of Public Health, Cairo, Egypt. Vice-Chairman. Representative.
- Dr. Szeming Sze, Resident Representative, National Health Administration of China, Washington, D.C., United States of America. *Vice-Chairman. Representative*.
 - Dr. T. L. Su, Technical Expert, National Health Administration of China, School of Pathology, University of Oxford, England. *Alternate*.
- Dr. G. D. W. CAMERON, Deputy Minister of National Health and Welfare, Ottawa, Canada. Representative.
 - Dr. Thomas C. Routley, General Secretary, Canadian Medical Association, Toronto, Canada. Alternate.
 - Dr. J. A. Melanson, Chief Medical Officer of New Brunswick Department of Health, representing the Dominion Council of Health, Fredericton, New Brunswick, Canada. Adviser.
- Dr. Demetrio Castillo, Assistant to the Director of Public Health, Caracas, Venezuela. Alternate.
- Dr. André CAVAILLON, Directeur général de la Santé, Ministère de la Santé publique, Paris, France. Representative.
 - Dr. H. Y. SAUTTER, Médecin Inspecteur de la Santé, Ministère de la Santé publique, Paris. Alternate.
 - Mme Catherine LABEYRIE, Chef de Bureau, Ministère des Affaires étrangères, Paris. Adviser.

- Dr. Karl Evang, Surgeon-General, Department of Public Health, Oslo, Norway. Representative.
- Dr. H. VAN ZILE HYDE, Senior Surgeon, United States Public Health Service, Washington, D.C., United States of America. Alternate.
 - Mr. L. Wendell HAYES, Specialist on International Organization Affairs, State Department, Washington, D.C. Adviser.
 - Mr. Samuel T. Parelman, Chief, International Organizations Branch, Office of Budget and Finance, Washington, D.C. Adviser.
- Sir Wilson Jameson, Chief Medical Officer, Ministry of Health, London, United Kingdom. (Attended only the first three meetings as representative, Dr. Mackenzie acting as alternate.)
- Dr. Melville Mackenzie, Principal Medical Officer, Ministry of Health, London, United Kingdom. Representative.
 - Dr. William KAUNTZE, Chief Medical Adviser, Colonial Office, London. Alternate.
 - Air Vice-Marshal C. H. K. Edmonds, Assistant Secretary, Ministry of Health, London. Adviser.
- Dr. Sergei Kolesnikov, President of the Alliance of Red Cross and Red Crescent Societies, Moscow, Union of Soviet Socialist Republics.

 Representative.
- Lieut.-Colonel C. Mani, I.M.S., Deputy Public Health Commissioner with the Government of India, New Delhi, India. Representative.
- Dr. Manuel Martinez Baez, Permanent Representative of Mexico to UNESCO, Paris, France. Alternate.
- Dr. Geraldo H. DE PAULA SOUZA, Director of the Faculty of Hygiene and Public Health, University of São Paulo, Brazil. Representative.
- Dr. Carlos E. Paz Soldán, Professor of Hygiene, Faculty of Medicine, University of San Marcos, Lima, Peru. Representative.
- Dr. George Muir Redshaw, Chief Medical Officer, Australia House, London. Representative.

- Dr. Cornelis van den Berg, Director-General of Public Health, Ministry of Social Affairs, The Hague, Netherlands. Representative.
 - Dr. Cornelis Banning, Chief Medical Officer of Public Health, The Hague. Alternate.
 - Dr. Willem A. Timmerman, Director, National Institute of Public Health, Utrecht, Netherlands. Alternate.
 - Mr. C. J. GOUDSMIT, Health Department, Ministry of Social Affairs, The Hague. Adviser.

The following were present as observers:

United Nations:

- Dr. Gustavo Da Sà Lessa, Director, Health Section, Department of Social Affairs.
- Mr. Bruce Turner, Assistant Director, Liaison and Co-ordination Division, Department of Economic and Social Affairs.

FOOD AND AGRICULTURE ORGANIZATION:

- Dr. J. M. LATSKY, Nutrition Specialist, Nutrition Division.
- International Children's Emergency Fund and International Refugee Organization:
 - Mr. Alfred Davidson, Principal Adviser to the Preparatory Commission of the International Refugee Organization.
 - Mr. M. K. AICKIN, Legal Adviser, Preparatory Commission of the International Refugee Organization.

INTERNATIONAL CIVIL AVIATION ORGANIZATION:

Mr. R. J. MOULTON, Member, Air Transport Bureau of PICAO.

INTERNATIONAL LABOUR ORGANIZATION:

Mr. C. W. H. WEAVER, Principal Chief of Section.

OFFICE INTERNATIONAL D'HYGIÈNE PUBLIQUE:

Dr. L. M. GAUD, Président de la Commission des Finances et du Transfert.

PAN AMERICAN SANITARY BUREAU:

Dr. Fred Soper, Director.

UNESCO:

- M. André DE BLONAY, Head of Section of External Relations.
- Dr. Joseph Needham, Head of Division of Natural Sciences.
- Dr. I. M. Zhukova, Counsellor in Medical Sciences, Division of Natural Sciences.

UNRRA:

Dr. Andrew Topping, Director, Health Division, European Regional Office, London.

Secretariat:

- Dr. Brock Chisholm, Executive Secretary.
- Dr. Yves M. BIRAUD, Deputy Executive Secretary.
- Dr. Raymond GAUTIER, Counsellor.
- Dr. Neville M. GOODMAN, Director of Field Services Division.
- Dr. E. J. Pampana, Secretary of the Expert Committee on Malaria.
- Mr. Leo RICHARDS, Controller.

CHRONICLE OF THE WORLD HEALTH ORGANIZATION

VOL. I, No. 7-8

1947

MALARIA

First Meeting of the Expert Committee on Malaria held at Geneva in April 1947.

The world events of the period from 1939 to 1947 had farreaching consequences for malaria, giving rise as they did not only to new problems, but also to new possibilities of combating the disease and even of eradicating it—a possibility hardly conceivable during the pre-war period. In the field of malaria the World Health Organization is now in a position to advance within measurable distance of its objective, "the attainment by all peoples of the highest possible level of health".

Malaria remains a great obstacle to the attainment of this objective. One of the effects of the Second World War in many regions was to intensify morbidity and increase mortality due to malaria: during the war and post-war period there were serious malaria epidemics every year. UNRRA helped to meet emergency post-war needs, ¹ but at the present time the only international organization in a position to furnish the necessary aid and technical co-operation is the World Health Organization. It should not be forgotten that malaria is still the most important among the diseases of tropical and subtropical regions, in both the East and the West, the prevention of which is feasible.

¹ In certain of the countries where it operated, especially in Greece, Yugoslavia and Italy, UNRRA furnished supplies and qualified personnel for the fight against malaria.

Broad perspectives have opened up for malariology, and it is no exaggeration to say that a new era has begun for the treatment of malaria and for methods of combating it.

The problem of malaria nevertheless remains so acute that the Interim Commission had good reason for its decision to appoint a Committee of Experts, which held its first meeting at the Palais des Nations, Geneva, from 22 to 25 April 1947. Its functions were to advise the Interim Commission concerning the creation and programme of a permanent Malaria Committee, with the help of the Draft Constitution submitted by Dr. Gabaldon to the Interim Commission at its second session. The Expert Committee, which is a temporary body, began its work with a detailed examination of Dr. Gabaldon's plan.

The Committee dealt both with use of chemotherapeutic substances and insecticides against malaria. During the course of the war, important progress was made in these fields. Methods of using the old drugs were perfected. To-day, new drugs and insecticides are largely employed.

As the war prevented to a considerable extent the dissemination of information on the experience gained in certain countries, the Committee felt that it would be useful for its report to include a summary of the present state of knowledge with regard to the fight against malaria.

The report ⁴ has two technical sections, one of which deals with anti-malarial drugs, and the other with the question of insecticides, especially DDT and the hopes and problems associated with it.

¹ It will be recalled that the Malaria Committee of the League of Nations, composed of some fifty members, prosecuted wide and fruitful activities, especially in the field of epidemiology and in the treatment and combating of the disease. See "The Work of the Malaria Committee of the League of Nations since 1930", by Edmond Sergent (doc. C.H./Malaria/268).

² The Expert Committee comprised:

Dr. Mihai Ciuca, Roumania;

Dr. N. Hamilton FAIRLEY, Great Britain;

Dr. Arnaldo Gabaldon, Venezuela (elected Chairman by the Committee);

Dr. Paul F. Russell, United States of America;

Secretary: Dr. Emilio J. Pampana, member of the Interim Commission Secretariat.

³ See WHO Chronicle 1, 3-4, p. 59.

⁴ Doc. WHO.IC/79.

The section devoted to anti-malarial drugs, especially atebrin, sontochin and resochin (chloroquine and aralen), plasmoquine and pentaquine and, finally, paludrine, has a particular interest for the practising doctor. These technical sections of the report will probably be published in Volume I, No. 1, of the World Health Organization Bulletin.

BIOLOGICAL STANDARDIZATION

First Meeting of the Expert Committee at Geneva in June 1947.

Rational application of a therapy is possible only when medicaments of a known potency are used. This principle received early recognition from the League of Nations Health Organization, which set up a Permanent Commission on Biological Standardization. Before the Second World War, that body had fixed standards for thirty-five substances the titration of which can be effected only by biological methods, and had thus made a highly important contribution to the progress of therapeutics. The substances selected by the Permanent Commission for Standardization were made up, preserved and distributed by the Copenhagen and Hampstead (London) Institutes, and placed at the disposal of manufacturers and research workers in the various countries.

However, "a 'biological' standard is obviously different from fixed standards, such as those for length or weight, in that it consists of a substance which is consumed in the course of its application. When a particular standard is nearing exhaustion and needs to be replaced, it is usually impracticable, and always unnecessary, to make a new standard preparation having exactly the same activity as the old one. What is required is that the value of the unit, as defined by an exact weight of the old standard, will not vary when re-defined in a weight of the new standard. The international unit, when once accepted, is thus permanent and unchangeable, though, in the course of many years, it is likely to be re-defined in terms of successive international standard preparations, and to be represented by a different weight of each." 1

Having regard to the necessity for replacing certain standards already consumed and of fixing others for substances not yet

¹ Dr. R. GAUTIER, Bull. Health Org., 1945/46, 12, 1.

standardized, the Interim Commission, on behalf of WHO—which is charged by its Constitution to continue the work in this field carried on by the League Health Organization—convened a Committee of Experts which met in Geneva from 9 to 13 June 1947.¹

A summary of its work appears below.

ADOPTION OF INTERNATIONAL STANDARDS

The experts adopted international standards for vitamin E, heparin and penicillin, all widely used drugs in urgent need of international standardization.

Vitamin E.

This vitamin, present in certain foods, notably wheat-germ, is mainly used to combat sterility. An international standard for vitamin E would probably have been adopted at the Third International Conference on the Standardisation of Vitamins, planned to take place in the autumn of 1939, but as this conference could not be held because of the war, British members adopted in 1941 a provisional standard constituted by synthetic racemic α -tocopheryl acetate. This standard was reviewed by the WHO group of experts and adopted as an international standard.

¹ The Expert Committee comprised:

Professor E. Grasset, Director of the Health Institute, Geneva. Dr. A. A. Miles, Director, Department of Biological Standards, National Institute for Medical Research, London.

Dr. J. Ørskov, Director, State Serum Institute, Copenhagen.

Lt.-Col. Sir Sahib Singh Sokhey, Director, Haffkine Institute, Bombay.

Dr. W. A. TIMMERMAN, Director, National Institute of Public Health, Utrecht (elected Chairman by the Committee).

Dr. J. TREFOUËL, Director of the Pasteur Institute, Paris.

Dr. M. V. Veldee, Chief, Biologics Control Laboratory, United States Public Health Service.

Dr. Raymond GAUTIER, Counsellor of the Interim Commission (Secretary).

² For a description of the standard preparation and what investigations led to its adoption, see *Bull. Hlth. Organ.*, 1941, 9, 436, 443, and *Nature*, Lond., 1941, 148, 472.

Heparin.

Heparin is a phosphatide present in various tissues but mainly in the liver, and used successfully as an anti-coagulant. On the initiative of the Department of Biological Standards of the National Institute for Medical Research, Hampstead, London, a provisional standard was established in 1942. This was examined by the Committee of Experts and adopted as an international standard.

Penicillin.

Penicillin is one of the most powerful weapons in the modern therapeutic arsenal. This antibiotic produced by various strains of *Penicillium notatum* and *Penicillium chrysogenum* can now be obtained not only in great quantities but in highly purified forms.

There are four main types of penicillins: I, II, III and IV in the British notation or F, G, X and K in the corresponding American notation.

There is clear evidence that the several penicillins differ in their in vitro activity, both between themselves and in their action on different test organisms. The therapeutic efficacy of penicillins depends not only on their in vitro potency but on other factors such as absorption, excretion, and destruction in the body. Experimental evidence indicates that K is particularly discrepant in this respect, being inactivated much more rapidly than all other penicillins. American scientists have presented evidence that penicillins presumed to contain a large amount of K were relatively ineffective in the treatment of syphilis. The clinical efficacy of K is now questioned, though the evidence needs confirmation and cannot be regarded as established until clinical trials are made of pure specimens of the different penicillins.²

The possibility of establishing an international standard for penicillin, essential for its correct therapeutic application, was considered during the war by the Health Section of the League of Nations. A Conference convened in London in 1944, and attended

¹ Bull. Hlth. Organ., 1943, 10, 144, 151.

² Note by the Department of Biological Standards, National Institute for Medical Research, Hampstead, London, doc. WHO.IC/BS/10.

by delegates of Australia, Canada, France, the United Kingdom and the United States of America, adopted two international standards: As master standard, a specimen of the pure crystalline sodium salt of penicillin II or G and as working standard a calcium salt of penicillin, the type of which was not specified.¹

Since 1944, however, a change in the character of commercial penicillin has been observed in the United States, according to a joint statement of the Committee on Medical Research, the Public Health Service and the Food and Drug Administration.²

Previously, commercial penicillin was predominantly penicillin G or a mixture of G and F. Subsequently the G content showed a tendency to decrease, whilst the fractions F and K increased. This change is attributed to the use of various strains of P. notatum and P. chrysogenum and of different techniques for the growth of the mould and the purification of the final product. Some samples have contained a substantial proportion of penicillin K which is relatively inefficacious.³

Moreover, there have been reports that the different types of penicillin were unpredictable in their in vitro activity, and the opinion has been expressed that, in certain infections at least, in vitro activity may not be an adequate measure of in vivo activity. The question now arises whether or not the international standards agreed upon in 1944 are affected by the discrepancy between the in vitro and in vivo activity of the different types of penicillin.

It is possible that the sample of penicillin G used in the standards is, in the light of more refined methods of analysis, not as pure as was originally supposed.

In spite of this, the group of experts agreed that the standards set up in 1944 should for the time being remain. It was felt that, in the present state of our knowledge, it was not possible to define more precisely the existing standard, adopted as an international basis of comparison, until we have more knowledge of the properties of penicillins other than II or G.

¹ For the report of this Conference and the results of the preliminary co-operative investigations, see Bull. Hlth. Organ., 1946, 12, 183.

² J. Amer. Med. Assoc., 1946, 25 May, p. 271, see also "Commercial Penicillin", by R. R. Willcox, Brit. J. Vener. Dis., 23, 1 March 1947.

³ Since July 1946, many of the manufacturing difficulties were overcome. It was reported that practically all the commercial penicillin in the United States consisted predominantly of G.

STANDARDIZATION OF ANTIGENIC SUBSTANCES

The group of experts considered the possibilities of standardizing certain antigenic substances—namely, diphtheria and tetanus toxoids as well as tuberculin and BCG. In this field, they began pioneer work. Indeed, if it had been possible to standardize some antitoxins a long time ago by determining the necessary quantity of antitoxin to neutralize a known quantity of toxin, such a method could not have been applied to toxoids and vaccines. In the light of recent discoveries, however, it appeared to the experts that the time was ripe for an attempt to determine international standards for some of these widely used substances.

Toxoids.

It was pointed out that crystalline diphtheria and tetanus toxins had recently been produced by alcoholic fractionization, showing the possibility of establishing standards of high purity for toxoids.

The Committee, believing that the establishment of international standard preparations of diphtheria and tetanus toxoids was both possible and desirable, recommended that the specimens of highly purified toxoids offered by Dr. Veldee be submitted to the Department of Biological Standards, Copenhagen, and to certain laboratories in interested countries for examination, to ascertain their suitability as international reference preparations. The Expert Committee will reconsider these toxoids, when interested workers have expressed their views with regard to the desirability and possibility of adopting the preparations under study as international standards.

Tuberculin.

Tuberculin is a very complex substance obtained by the concentration of the media in which tubercle bacilli are grown. It is used for two main purposes:

- (a) As a guide to the incidence of the tuberculous infection in a body which offers no demonstrable clinical reaction (Mantoux, von Pirquet and other skin tests);
- (b) As a method of treatment for certain forms of tuberculosis.

From the time when tuberculin began to be employed it was obvious that the value of this new method of diagnosis depended

largely upon the exact knowledge of the potency of the preparation used.

Unfortunately, two batches of tuberculin may differ in potency even if prepared in exactly the same manner, by the same worker, in the same laboratory, with the same strain of tubercle bacilli, the same culture medium, and the same incubation time. The potency of tuberculin prepared in different laboratories using different strains of tubercle bacilli, culture media, etc., will often vary considerably. When the same dosage of such tuberculins with variable strength are used, almost any percentage of reactors can be obtained in the same population groups. A comparison of the results of different tuberculin surveys is possible only when the same dose of tuberculin of the same strength has been used, or, within some limits, when the comparative strength of the tuberculin employed is known.

This was recognized by the Health Organization of the League of Nations, which in 1931 established an international standard constituted of Koch's "Alt-Tuberkulin" (Old Tuberculin).

When a new type of tuberculin, the "Purified Protein Derivative", was developed by American workers, 500 times more active than O. T. when used in equal weight, and offering distinct advantages, especially in its application in the skin-tests, the question arose whether a new international standard was not urgently necessary. The Committée of Experts discussed this problem during the recent meeting, and recognized that there was a definite need for an international standard for P.P.D. It was decided that a preparation of P.P.D. originally obtained by Dr. Madsen and stored during the war at the National Institute of Health, Bethesda, should be transported from Washington to the State Serum Institute, Copenhagen, so that a comparative trial of this preparation by various workers could be made, with a view to its adoption as an international standard.

The Committee finally recommended that, when sufficient experimental data on the P.P.D. preparation are secured, interested workers should be invited to express their opinion upon the desirability and possibility of defining the biological activity both of P.P.D. and of Old Tuberculin in terms of international units.

¹ From a note prepared by the State Serum Institute, Copenhagen, doc. WHO.IC/BS/16, 2 June 1947.

B.C.G.

· B.C.G. is used for the prevention of prima tubercular infection in man. The method which has been used for more than 25 years is rapidly gaining in popularity. The number of persons treated with this vaccine is extremely high and there is no doubt that it will increase still more.

As the vaccine is a live preparation and cannot be preserved indefinitely, attempts have been made to ensure that the vaccinal suspension is always prepared under suitable conditions. Calmette felt the need of this, and he made it a rule in his laboratory that no B.C.G. strain should be issued abroad for human vaccination unless the Government of the nation applying for it appointed a laboratory to be officially entrusted with the task of preparing the vaccine under conditions guaranteeing perfect safety. Moreover, the personnel in charge of this work had to undergo a period of training at the Pasteur Institute, to familiarize themselves with the method of preserving the strain and of preparing the vaccine (Dr. Bretey 1).

In the opinion of Dr. J. Ørskov, member of the Expert Committee, it is impossible to achieve a real standardization of B.C.G. vaccine. Making a vaccine that will be uniform every time cannot be done, even when following explicit rules. This applies to B.C.G. as much as to any other live vaccine.

In his view, to arrange that the vaccine be made in the fewest possible number of laboratories, these laboratories maintaining close contact with one another and making mutual comparisons of their B.C.G. strains and vaccine, was more important than to establish standard rules now for the preparation of vaccine.

The Committee agreed that it was at present impracticable to set up a standard for B.C.G. vaccine, but, in order to meet the urgent need for uniformity of the B.C.G. vaccines in current use, the Committee recommended that:

- (a) The original strain of B.C.G. kept at the Pasteur Institute, Paris, should be made internationally available;
- (b) The State Serum Institute, Copenhagen, which already distributes on behalf of the Committee a number of the

¹ Doc. WHO.IC/BS.27.

international preparations, should also distribute the B.C.G. strain;

(c) The preparation and use of the vaccine in each country should be centrally co-ordinated.

HUMAN BLOOD ANTIGENS

The A B O System.

The Committee recommended that international standards for Anti-A serum and Anti-B serum should be established. To this end a pooled sample of high potency human Anti-A serum and one of Anti-B serum should be submitted to comparative tests by various workers and their potency expressed in appropriate units.

The Rh System.

The Committee recognized two urgent problems concerning the Rh antigens, namely:

- (a) The provision of an agreed international nomenclature;
- (b) The establishment of standard antisera for those Rh antigens which are important in medical and obstetrical practice.

The Committee proposed to create an Expert Sub-Committee on Rh Antigens to study these two subjects and report on them. This Sub-Committee is to consist of geneticists and hæmatologists, to be proposed after consultation with interested workers in the various countries.

THE VITAMINS

It was considered that the following problems in the domain of vitamins were the most urgent:

(a) The replacement of the present international standard for vitamin A, which is a preparation of β carotene, by a standard consisting of a vitamin A ester.

The existing international preparation of β carotene should then be established as an international standard for β carotene, for agricultural purposes.

(b) The replacement of the existing international standards for vitamin D, which were respectively preparations of calciferol (vitamin D_2) and irradiated ergosterol, by an international standard consisting of vitamin D_3 .

The experts proposed the creation of an Expert Sub-Committee on the Fat-soluble Vitamins to study these two subjects and report on them, the members of the Sub-Committee to include experts already at work on these problems.

They also discussed the vitamins not yet standardized, and considered that they were either sufficiently well characterized by physical and chemical means, or at this stage so ill-defined in their biological action as to preclude any attempt at standardization.

OTHER PROBLEMS

It was decided to replace the old international standard for Digitalis and Sulpharsphenamine, the stocks of both being almost exhausted. The experts also approved the emergency action taken by the National Institute for Medical Research, Hampstead, in replacing the standard preparations for several other substances, including Androsterone and Progesterone. The possibilities of setting up an international standard for Streptomycin were investigated, but it was generally agreed that the time was not yet ripe for such action.

* * *

It is clear that the task of the experts during this first meeting was very heavy. This was the result of the suspension of the activities of the Biological Standardization Commission of the League of Nations during the war and of the considerable progress achieved in medical science.

HEALTH FORMALITIES

Conference at Geneva of Experts on Passports and Frontier Formalities.

A meeting of experts of the Social and Economic Council of the United Nations was held at Geneva from 14 to 26 April 1947 for the purpose of formulating recommendations to serve as a basis for the next World Conference on questions relating to passports and frontier formalities to be held in November or December 1947. Dr. J. FABRE attended as observer for the World Health Organization.

Matters of interest to WHO related to health documents and health formalities at frontiers, viz.:

- (1) Usefulness or otherwise of medical certificates such as are required by certain authorities of persons entering their territories;
- (2) The need to maintain or abolish the "Personal Declaration of Origin and Health" (recommended for adoption in Article 9 (4) of the International Sanitary Convention for Aerial Navigation, 1944);
 - (3) Certificates of inoculation and vaccination;
 - (4) Health formalities at frontiers.

As regards (1) and (2), the Committee took no decision. As regards (3), the Committee urged Governments to accept, as evidence of vaccination and inoculation, certificates after the international health pattern as laid down by the International Sanitary Conventions now in force, with such modifications as WHO might subsequently wish to introduce. Certificates should be simplified, made uniform and reduced to the absolute minimum compatible with the safeguarding of public health.

As regards (4) the Committee agreed with the ICAO proposal: "The medical examination of crew and passengers with their baggage should be made without charge. The clothes and baggage of crew and passengers who have embarked in or passed through endemic areas should be subject to examination for disease vectors and insects. Such examination should be conducted as rapidly as possible by or under the supervision of the public health authorities.¹

The Committee considered that all matters of interest to WHO should be submitted for opinion to the World Health Organization Expert Committee for the revision of the existing International Sanitary Conventions and thus permit suitable proposals in this connexion to be put forward at the First World Health Assembly.

¹ This proposal refers chiefly to air travel.

AID THROUGH VISITING LECTURERS

A group of eight American and two Swiss medical experts has recently spent two months in a lecturing tour in Austria. The mission was organized by the Unitarian Service Committee of the United States of America and was the first travelling teaching unit to be sponsored by the World Health Organization Interim Commission.

The reasons for this visit have been explained by Dr. Brock Chisholm, Executive Secretary of the Interim Commission, in the following terms:

"Thousands of doctors all over the world have lived behind the curtain of censorship during the war years, working alone and unable to share in the knowledge of their associates in other countries. Only a few will be able to travel to centres of new research. This is why top-ranking specialists in a dozen fields are volunteering for this two-month visitation to hospitals, clinics and universities."

Throughout the tour, the members of the mission travelled as a group to the main centres of medical teaching (Vienna, Innsbruck, and Graz) lecturing, participating in conferences, and demonstrating new medical and surgical techniques and the use of some of the more recently developed sera and drugs.

Dr. Maurice B. VISSCHER, Professor of Physiology and Head of the Department of Physiology at the University of Minnesota, was Chairman of the Group and Dr. Erwin Kohn, Director of Medical Projects of the Unitarian Service Committee, acted as Executive Director. The mission also included Dr. John J. Bittner, Professor of Cancer Research at the University of Minnesota; Dr. McKeen Cattell, Professor of Pharmacology at the Cornell University, New York; Dr. Stuart C. Cullen, Professor of Anæsthesiology at the University of Iowa; Dr. Joseph P. Evans, Associate Professor of Surgery at the University of Cincinnati, Ohio; Dr. Chester M. Jones, Clinical Professor of Medicine at Harvard Medical School, Boston; Dr. Eric Martin, Professor of Medicine at the University of Geneva; Dr. Hermann Mooser, Professor of Bacteriology and Hygiene at the University of Zurich, Switzerland; Dr. S. Bernard Wortis, Professor of Psychiatry at the New York University College of Medicine.

Some of the principal subjects of the lectures were lung and heart surgery, anæsthetics, surgical shock, frontal lobotomy and leucotomy, recent advances in cancer research, etc. The results of this two months' visit have been highly gratifying. Austrian scientists and doctors were quick to appreciate the opportunity, the first since the war, to discuss important medical problems with their foreign colleagues, and to hear first-hand accounts of many of the recent developments in medical science and practice.

THE FELLOWSHIP PROGRAMME OF THE INTERIM COMMISSION

The international exchange of knowledge and experience is one of the principal factors in the solution of medical and health problems. Apart from international congresses, few organized attempts had been made up to the period of the First World War to promote this exchange. The knowledge, the experience and the technical information were confined to the individual countries.

The end of the first world war saw the recognition of the necessity for international action in the field of public health, and the Health Organisation of the League of Nations performed an invaluable function in promoting study tours and the exchange of personnel between the various countries. These international activities, carefully built up during the years of peace, ceased on the outbreak of the Second World War, apart from war-time contacts between the Western Allies. A large part of the European Continent, submerged beneath the German occupation, was cut off from the knowledge of recent developments in medical science.

This situation came to an end in the last stages of the war with the establishment of UNRRA, which regarded as one of its most important functions the supply of medical help, both in material and practical assistance, to countries devastated by the war. Among other activities in the programme of health rehabilitation, UNRRA made arrangements early in 1946 for thirty-five specialists to be sent as Fellows to the United States, Canada and some European countries.

After its creation, in July 1946, the Interim Commission of WHO took over from UNRRA the greater part of its health activities and considerably expanded its fellowship programme.¹ The names

¹ WHO Chronicle, 1947, 1, 3-4, 48.

of 172 men and women, specialists in public health and the basic medical sciences, as well as sanitary engineers, statisticians and nurses, from Austria, China, Czechoslovakia, Finland, Greece, Northern and Southern Korea, the Philippines, Poland and Yugoslavia, have been submitted to the Interim Commission for fellowships and travel grants up to the end of August, with a few score more to be expected from Hungary, Italy, Ukraine and Byelorussia.¹

Plans have been made to send the Fellows to the United States, Canada, the United Kingdom, Sweden, Denmark, Switzerland, France, the Soviet Union, Netherlands, India, Egypt and even to exchange them between the aided countries in some special fields because, as is understandable, research and development in the medical sciences were not entirely extinguished even in war-stricken countries. In the host countries, the acceptance of fellows has been prepared in co-operation with the Universities, Governmental agencies, teaching foundations and by the personal visits of members of the staff of WHO to countries where the bulk of the Fellows are to be placed. Thus, for instance, in the United Kingdom a common effort was organized by the Ministry of Health, the British Post-graduate Medical Federation and the British Council to place and accommodate Fellows in such a way that their stay in England, already crowded with other students from the Dominions and Colonies, would be profitable. In the same way, some twenty-five Universities as well as other institutions were contacted in the United States and here, even though they are facing their own problem of war veterans returning to their medical studies, response was especially good.

On the Continent, owing to lack of time, only Sweden and Denmark were visited. In these countries most hearty co-operation was extended. Elsewhere contacts have been made generally through the country's representative on the Interim Commission of WHO whose effective help was much appreciated. Last but not least, Switzerland, the seat of the European Office, has absorbed a considerable number of Fellows in the best tradition of Swiss hospitality.

Financial responsibility for the programme rests entirely on the Interim Commission of WHO. Every Fellow—most of them University teachers or potential teachers, outstanding Public Health

¹ Of the 172 applications received up to 27 August, 64 have been favourably considered, 5 were refused, and 103 are still under consideration. Twenty Fellows were already in the field at that time.

men and specialists in all kind of medical techniques—will receive a reasonable monthly subsistence allowance, a special allowance for the purchase of technical books, tuition fees where necessary and travel expenses, including local travel in the country of study.

There is no doubt that the exchange of knowledge and experience in health is not only an immediate post-war measure but will continue so long as the promotion and protection of health is regarded as a paramount international concern.

Further development will depend largely on the return to normal international conditions. There is an urgent need to extend the programme of fellowships to all Member States of the World Health Organization. An endeavour should be made to concentrate on fewer Fellows for longer-term grants and to exercise extreme care in the selection of candidates. The programme should be approached not as an emergency measure but rather as an integral part of medical education.

RATIFICATION OF THE WORLD HEALTH ORGANIZATION CONSTITUTION: THE PRESENT POSITION

The Constitution of the World Health Organization, which was signed in New York in 1946 by 64 Governments, will come into force when 26 Member States of the United Nations have become parties to it. Six months at the latest after that date the World Health Assembly is to be convened.

Up to 15 September 1947, fifteen Member States of the United Nations had ratified or unconditionally accepted the Constitution: China, the United Kingdom, Canada, Iran, New Zealand, Syria, Liberia, Ethiopia, the Netherlands, Saudi Arabia, Turkey, Union of South Africa, Norway, Egypt and Sweden.

Seven States non-members of the United Nations have likewise ratified or unconditionally accepted the Constitution: Switzerland, Transjordan, Italy, Roumania, Albania, Eire and Austria.

REPRESENTATION OF WHO AT AMAZON RESEARCH MEETING

Dr. Fred L. Soper, Director of the Pan American Sanitary Bureau, Washington, D.C., represented WHO at a meeting of the Scientific International Commission of the Hylean Amazon at Belem do Para, Brazil, on 12 August. The Commission is concerned with research activities into the flora and fauna of the tropical region of the Amazon basin as they affect the native population.

PUBLICATIONS

Bulletin of the League of Nations Health Organisation.

Number 3, Volume XII, of the Bulletin of the League of Nations Health Organisation was published, after the liquidation of the League, by the Secretariat of the Interim Commission of the World Health Organization, which fell heir to its functions.

Among the articles in this number, that on rabies is one of particular interest.

The International Rabies Conference of 1927 invited the Health Organisation "to publish statistics of the results of anti-rabies treatment in the different anti-rabies institutes of the world". The object was to determine the conditions most favourable to the success of anti-rabies treatment and if possible to select from among the various methods of vaccination employed the one that offered the greatest measure of security.

Dr. A. G. McKendrick was allotted the task of analysing the statistical data received. Up to 1937 he published nine successive reports dealing with 1,062,704 treated persons. After his death in 1943, Major Greenwood, Professor Emeritus of Epidemiology and Vital Statistics in the University of London, was asked to complete the enquiry. The "Tenth Report on Data of Anti-Rabies Treatments supplied by the Pasteur Institutes", which is the last of the series, makes a comprehensive survey of the results

¹ For previous reviews, see document L.o.N. C.H. 844 and the following *Health Organization Bulletins*: 1932, 1, 117 and 746; 1933, 2, 591; 1934, 3, 646; 1935, 4, 777; 1937, 6, 19; 1938, 7, 1; 1940, 9, 33.

obtained from a total of 1,670,848 treated persons. Here are the fruits of an experiment of unique scope in the history of antirabies treatment.

The first part of the article is devoted to the results of the Tenth Review, dealing with 228,051 persons treated since 1938. A series of tables shows the distribution of cases according to the vaccine employed, the species of biting animal, the severity and position of the bite, and the number of days elapsing between the bite and the commencement of treatment. Other tables give the respective percentages of treated persons who were bitten on the bare skin and through clothing, the number of cases of post-vaccinal paralysis, mortality by race of the victim and, finally, world mortality.

The second part of the article is devoted to a critical analysis of the views of the late Dr. Maria J. van Stockum, who had advanced the opinion that the classic Pasteurian treatment was valueless, and to a general discussion of the lessons to be learned from this important survey.

Other articles in this number include:

"The Biological Assay and Control of Tetanus Toxoid" (L. Greenberg, J. Gibbard and C. A. Morrell); "On the Standardisation of Haffkine Institute Polyvalent Anti-snake-venom Serum against the Venoms of the Four Common Indian Snakes (Cobra, Common Krait, Russell's Viper and Saw-scaled Viper)" (A. K. Hazra, D. C. Lahiri and S. S. Sokhey); "A Provisional Standard for Staphylococcus β Antitoxin" (Johs. Ipsen and O. Rostock); "The Ecology of Sandflies at the Larval Stage and the Epidemiology of the Diseases transmitted by Them" (L. Nájera); "Nutrition in Rural Districts in Greece" (G. P. Alivisatos and Ad. Joustinianos).

Final Number of the

"Bulletin of the Office International d'Hygiène Publique".

The October-November-December 1946 number of the Bulletin of the Office International d'Hygiène Publique was published under the joint auspices of the Office and the Interim Commission of the World Health Organization. This number will be the last of the series, as, in accordance with a mutual decision by the Office and the Interim Commission, the publication will be continued as the Bulletin of the World Health Organization.

This final number of the Office Bulletin, which mentions the Interim Commission of the World Health Organization on its cover, has a section devoted to the health laws and regulations of the Belgian Congo, the Principality of Monaco and Tunisia; various analyses of medical works and articles; health measures and information for the last quarter of 1946; and the communications and reports made to the Permanent Committee by delegates in the course of the October 1946 session, the chief of which are discussed below.

Of eight articles on tuberculosis, five deal with various aspects of the disease during the war: in England (Sir W. Dalrymple-Champneys), Bulgaria (Dr. Koussitassef), Switzerland (Dr. P. Vollenweider), and France (Dr. Lotte and Drs. Aujaleu, Lotte & Péquignot). Three others discuss the technique and results of anti-tuberculosis vaccination by means of BCG in France (Dr. Lotte and Drs. L. Nègre & J. Bretey) and Sweden (Dr. A. Wallgren).

Smallpox is the subject of five other articles. One describes the importation of smallpox into England during the first half of 1946 and indicates the part played in the spread of smallpox cases by atypical forms of the disease which occur among subjects vaccinated a fairly long time ago (Dr. M. MACKENZIE). Two others discuss "immunity reaction" following vaccination against smallpox (Dr. J. C. Broom and Dr. P. Vollenweider). The last two discuss the respective frequencies of post-vaccinal encephalitis in the Netherlands (Dr. C. Van den Berg) and England (Dr. M. MACKENZIE) and lead to the conclusion that this complication could be avoided in most cases if children were vaccinated before the age of two.

Three articles are devoted to the cases of typhus fever which appeared at the end of the war in France (Dr. J. BOYER), England (Dr. M. MACKENZIE) and Portugal (Dr. A. CARVALHO DIAS).

Of two studies on plague, one points out the primary role played by rat-fleas in interhuman transmission of bubonic plague (Dr. N. H. SWELLENGREBEL), and the other emphasizes the good effects of the sulphanilamides, particularly sulphathiazole and sulphadiazine, in treatment (Dr. C. Mani).

Finally, there are a number of articles on a diversity of subjects such as the fight against typhoid fever in Warsaw during the second German occupation (Dr. Lontzki), cerebro-spinal meningitis in French West Africa and in Togoland (Dr. Peltier), persistent endemic foci of certain acute infectious conditions (Dr. W. Chodzko), the propagation of venereal diseases in Bulgaria (Dr. Koussitassef),

the new organization of the Roumanian Academy of Medicine (Dr. Danielopolu), epidemic poliomyelitis in Bulgaria from 1931 to 1945 (Dr. Koussitassef), malaria in Italy during the war (Dr. G. A. Canaperia), deratization of ships (Dr. P. G. Stock), and control of anti-yellow-fever vaccine from the Pasteur Institute at Dakar (Dr. Peltier).

Epidemiological and Vital Statistics Report.

The second number, July 1947, of the Epidemiological and Vital Statistics Report, the monthly supplement to the Weekly Epidemiological Record, gives detailed statistical information regarding the incidence of cholera, yellow fever, plague, typhus fever, smallpox and relapsing fevers.

The August issue, Vol. I, No. 3, contains an article on "Recent Birth-rate Trends" by Knud Stowman. The general impression, concludes the author, is that, while during the first third of the 20th century areas of low fertility were formed, which grew steadily larger and deeper, from the middle of the 1930's onwards, the tide began to turn and the birth rate rose in countries where they were lowest; the Second World War did nothing to stop it. In Western and Northern Europe, in North America and Australia, the generation of women who were responsible for the fall of the birth rate is now reaching the end of its potentially fertile life. It is apparently being replaced by young women wanting and having more children. Meanwhile the birth rate continued to fall during another ten years in those countries in which the decrease in fertility occurred only at a later stage. Discussing future possible developments, the author points out that up to about 1960 a decreasing number of women will reach each year the age of the middle twenties—the best child-bearing age—on account of the low birth rates prevailing when they were born. Many of the men whom the young women of to-day expected to marry died in the war, and many young mothers became widows. The birth rate will therefore be struggling in the future against severe handicaps.

The number also contains statistical tables giving the birth rates in various countries, birth rates in the large towns of Europe and birth rates in some large towns in other parts of the world.

2000 A., 2000 F., 10/47. Imprimerie de «La Tribune de Genève».

CHRONICLE OF THE WORLD HEALTH ORGANIZATION

VOL. I, No. 9

1947

FOURTH SESSION OF THE INTERIM COMMISSION

The fourth session of the Interim Commission which was held at Geneva from 30 August to 13 September was opened by the Chairman, Dr. Andrija Stampar. New representatives who attended were Dr. P. Z. King, Vice-Minister of Health, Nanking, who, with Dr. Szeming Sze, Vice-Chairman of the Interim Commission, constituted the Chinese delegation, and Dr. N. Vinogradov, Vice-Minister of Health of the U.S.S.R. Surgeon-General Thomas Parran, who did not attend the last session, returned as representative of the United States. Dr. Geraldo De Paula Souza, Director of the Faculty of Hygiene and Public Health, University of São Paulo, was elected one of the three Vice-Chairmen of the Interim Commission to replace Dr. Octavio Mondragón, who was unable to attend the meeting. Dr. Karl Evang, Surgeon-General of the Department of Public Health, Norway, was elected Chairman of the Committee on Priorities.

Now that 15 Member States of the United Nations have already ratified the Constitution of the World Health Organization, it is hoped that the First World Health Assembly, which must be convened not later than six months after ratification of the Constitution by 26 Members of the United Nations, will meet possibly in May or June 1948. As the First Assembly will be, in the words of Dr. Stampar, "extremely important and very significant in the history of humanity and the United Nations" and as the Interim Commission carries the heavy burden of the preparatory work, the agenda of this session was very crowded and some evening meetings were necessary. An enormous amount of work was done, as the

different subjects were referred to the various internal committees for discussion before being presented to the plenary sessions for the approval of the Interim Commission itself. In the following pages a summary will be found of the decisions taken during the two weeks' debates.

INTERNATIONAL EPIDEMIC CONTROL

The possibilities of preventing new disastrous epidemics similar to those which claimed millions of victims only a few decades ago, as well as the means of control of epidemics still existing in various areas of the world, were discussed at some length by representatives under the chairmanship of Dr. Melville Mackenzie (United Kingdom).

This was one of the chief tasks of international health organizations, such as the Pan American Sanitary Bureau, the Office International d'Hygiène Publique, the Health Organization of the League of Nations and, most recently, the Health Division of UNRRA.

There was general agreement that the former system of sanitary conventions was no longer adequate for present needs. It was the opinion of Dr. Thomas PARRAN (United States) that the mechanism of international conventions had been shown by experience to be too slow and unwieldy for the effective control of the international spread of disease, owing largely to the fact that such conventions must be subjected to complicated national legislative processes, even though any revisions involved might be purely technical in nature. In a note submitted by him, it was clearly shown that the old system of international sanitary conventions, far from uniting the States on measures to prevent the spread of disease along the highways of international maritime and aerial navigation, resulted only in a confused situation whereby certain States parties to the most recent conventions were still bound to obsolete provisions of earlier conventions, while other States were not bound to any convention To show how slowly international sanitary conventions came into effect, Dr. Parran recalled that the convention signed on 17 January 1912 did not become effective until 17 October 1920. that signed on 21 June 1926 not until 22 May 1928 and that signed on 12 April 1933, not until 1 August 1935. 1

¹ Doc. WHO.IC/T/2, 3 September 1947.

An entirely new mechanism for the international control of epidemics is envisaged in the WHO Constitution. Under Article 21, the World Health Assembly is given authority to adopt regulations concerning, among other things, "sanitary and quarantine requirements and other procedures designed to prevent the international spread of disease". The "regulations adopted . . . shall come into force for all Members after due notice has been given of their adoption by the Health Assembly except for such Members as may notify the Director-General of rejection or reservations within the period of time stated in the notice" (Art. 22). This means that it will be no longer necessary to convene special diplomatic conferences for the establishment of the slow and complicated machinery required for the ratification of a convention, which in itself marks an important step forward.

Representatives took advantage of the facilities provided by the WHO Constitution to tackle the problem of international protection against communicable diseases, not by appointing an expert committee for the revision of existing international sanitary conventions, as had previously been proposed, but by forming an Expert Committee on International Epidemic Control. This, in other words, means that the experts will confine themselves not to the study of the revision of the existing international sanitary conventions but to the definition of those International Health Regulations which may be necessary for the prevention of epidemic diseases.

A new era was thus inaugurated in the history of the international control of epidemics.

It was agreed that membership of this important Expert Committee would include *ex officio* the President of the *Office International d'Hygiène Publique* and the Director of the Pan American Sanitary Bureau as well as a representative of the International Civil Aviation Organization.

The terms of reference of the new Expert Committee are the following:

"The world epidemiological situation has greatly changed since the times of the Sanitary Conventions of 1903, 1912 and 1926. It is therefore desirable, in view of the new methods of control, to examine the circumstances underlying the spread of the major epidemic diseases and to re-study the principles which should serve as a basis for their international control.

"The terms of reference of the Expert Committee are to make these examinations and studies, confining them to technical consideration.

"The Expert Committee on International Epidemic Control will submit a report making such recommendations as it considers appropriate in consequence of its study to the Interim Commission."

THE FIGHT AGAINST INFLUENZA

Influenza, which has caused the death of millions in the past, is always a potential menace to world health, and definite steps have now been taken by the Interim Commission to fight it on an international level.

During the third session, Dr. C. VAN DEN BERG (Netherlands) had drawn the attention of the Interim Commission to the fact that an influenza pandemic in the near future was by no means an imaginary danger and it had been unanimously agreed that the Commission dared not risk a sudden outbreak of the disease without being in a position to take energetic measures to meet the threat.¹

As the Fourth International Congress of Microbiology met in Copenhagen from 20-26 July 1947, it was decided to take advantage of the presence there of many leading workers on influenza, and obtain expert advice on the possibility of successfully fighting the disease in the present stage of our knowledge. Dr. Raymond Gautter, Counsellor of the Interim Commission, was sent as observer to collect information, especially as regards prophylactic immunization.

Seventeen papers on influenza were read in the Virus Section of the Congress. Since none had direct bearing on the practical attack on the influenza problem on an international level a special meeting of 45 interested experts was held at the Rigsdag on 25 July 1947. After a general discussion, a small Committee was chosen to consider how the views expressed could best be put into practice. The Committee consisted of Dr. R. Gautier (Switzerland), in the Chair, Dr. J. Ørskov (Denmark), Professor G. Olin (Sweden), Dr. W. F. Friedewald (U.S.A.), Professor J. Mulder (Netherlands), Dr. C. H. Andrewes (United Kingdom), Dr. W. I. B. Beveridge

¹ See WHO Chronicle, 1, 5-6, p. 82.

(Australia), Dr. G. J. STEFANOPOULO (Greece), and Dr. J. VIEUCHANGE (France).

At the request of the Committee, Dr. C. H. Andrewes prepared a memorandum ¹ which was discussed by the Interim Commission. The memorandum stressed the fact that "to avert 'another 1918' we need most of all to gain understanding of the epidemiology of the influenza of these times in hope of learning, amongst other things, about the occurrence of mutants and their spread." This need naturally results from the fact that "the influenza virus is a particularly labile one, apt to produce mutant strains" of the kind which were responsible for the 1918-1919 pandemic. The virus may at any time, according to Dr. Andrewes, produce another such mutant, and again kill its millions.

Dr. Andrewes' memorandum did not give much hope of the possibility of successfully combating influenza by means of preventive vaccination on a purely national basis. It specifically pointed out that, although some striking successes in vaccination had been reported from the United States, last winter's results were rather disappointing and suggested that this might have been caused by the fact that the 1947 strains may have been antigenically remote from the strain used for the vaccine. If so, this meant that there was some hope of isolating a strain at the beginning of an epidemic and preparing a vaccine before the epidemic was over. This was especially desirable in cases where a lethal strain was spreading from one country to another, when international action alone could prove effective.

In the light of these facts, it appeared to Dr. Andrewes that effective international action against influenza would require the setting-up of an Influenza Centre, the functions of which would be:

- (1) Collection and distribution of information regarding the outbreak of influenza epidemics in any part of the world, including specification of the serological types involved, so that appropriate measures, such as the preparation of the corresponding vaccines, could be taken without delay by countries menaced.
- (2) Collection and distribution of pathological material. Some countries would have, and in time all should have, labora-

¹ Doc. WHO.IC/97, 13 August 1947.

tories capable of making a serological diagnosis as between influenza A and B, isolating the virus and sending it to the central laboratory for further study. Existing laboratories in many countries could be designated as "regional influenza laboratories", but would have to agree to use common techniques. Laboratories capable of acting as regional laboratories exist at the present day in at least the following countries: Argentine (probably), Australia, Canada, Denmark, France, Great Britain, Hungary, Netherlands, South Africa, Union of Soviet Socialist Republics, United States of America.

(3) Education in the central laboratory of staff from countries at present lacking trained workers.

In the discussion which took place, the general opinion was that the Interim Commission should adopt the propositions made by Dr. Andrewes. Dr. Cavaillon (France), Dr. Vinogradov (U.S.S.R.) and Dr. Evang (Norway), among others, stressed the importance of the action proposed. It was finally decided that the establishment in England of an International Influenza Centre would be highly desirable and that a credit should be made available in order to facilitate the creation of such a Centre. Surgeon-General Thomas Parran offered to make available the National Institute of Health in Bethesda as a regional laboratory and his proposal was gratefully accepted.

INTERNATIONAL ACTION AGAINST PLAGUE

Plague has been an international problem for many years; while it is no longer a universal threat, nevertheless it endangers the life of a large section of the population of Asia.

Dr. Szeming Sze, on behalf of the Chinese delegation, presented a proposal that active steps be taken to combat the disease effectively. It was pointed out that recent advances in knowledge concerning both preventive and therapeutic measures against plague justified a new appraisal of the situation by international experts. Such advances, the Chinese delegation believed, included new experience gained in anti-plague vaccines, both live and killed, new rodenticides such as ANTU and "1080", new insecticides such as DDT, new drugs such

as the sulpha drugs, and new antibiotics such as streptomycin. The Chinese delegation noted that in the light of the latest reports, there was hope that international action could achieve the complete eradication of the disease throughout the world. As international action against plague required much preliminary study, extensive machinery and considerable expense, the Chinese delegation proposed that the subject be placed on the agenda of the First World Health Assembly which would discuss the practical means of attacking the disease. Dr. Karl Evang reminded the representatives that in the case of influenza valuable information had been obtained from informal discussion by a group of experts present at the Fourth International Congress of Microbiology. As the Fourth International Congress of Tropical Medicine will meet in Washington on 12 May 1948, he suggested that an informal meeting be arranged with the plague specialists participating in that Congress. This proposal was adopted.

VENEREAL DISEASES

Venereal diseases were given top priority at the recent session of the Interim Commission. The problem had already been discussed by representatives at an earlier session¹, and Dr. T. Guthe had been appointed to the Secretariat as expert in venereal diseases. As a result of the memorandum² presented to the Interim Commission, it was decided to undertake a further survey with regard to scientific and practical aspects of the problem and to appoint, at a later stage, an Expert Committee consisting of not more than four members to prepare a programme of international action against venereal diseases for the consideration of the Interim Commission at its fifth session and the First World Health Assembly.

SCHISTOSOMIASIS

Schistosomiasis is one of the most widespread diseases affecting both man and domestic animals. Indeed, the view has been expressed more than once that in large areas in the world this disease has done more harm than most other diseases. Most of the African continent as well as large areas in Asia and South America are infested by the parasitic worm which is the cause of the disease. In China alone

¹ See Chronicle WHO, 1, 3-4, p. 61.

² Doc. WHO.IC/104, 30 August 1947.

more than 5,000,000 people are suffering from it, and, according to Faust, probably more than 100,000,000 persons are exposed to infection in that country. Dr. Aly Tewfik Shousha Pasha, representative of Egypt, who had brought the subject to the attention of the Interim Commission at the third session, presented a memorandum at the fourth session, and expressed the view that this scourge could be eliminated only by energetic international action. He was strongly supported by Dr. King (China), Dr. Castillo (Venezuela) and Dr. Cavalllon (France) in his proposal that the subject be placed on the agenda of the First World Health Assembly with the recommendation that an Expert Committee be established to determine the necessary international action. The proposal was approved.

QUARANTINE MEASURES AGAINST PSITTACOSIS

The possibility of an outbreak of an epidemic of psittacosis was one of the subjects on the agenda of the recent session.

Psittacosis is a virus disease of birds which is conveyed secondarily to man usually through contact with parrots or parakeets. The first case was noticed at Uster, Switzerland, in 1879, and since then cases have been reported from many different parts of the world.

Following the widespread outbreak of 1929-1930, a number of countries took quarantine measures to avoid the introduction and spread of this disease either by prohibiting completely or regulating the importation of birds of the Psittaci family: parrots, parakeets, love-birds, macaws, cockatoos, lories, etc.

An enquiry by the Office International d'Hygiène Publique in 1936 showed that 16 countries had taken defensive measures of this nature: Algeria, Australia, Belgium, Canada, Denmark, Egypt, Germany, Morocco, the Netherlands, the Netherlands Indies, New Zealand, Portugal, Sweden, Switzerland, the United Kingdom and the United States of America.

It was considered advisable to bring up to date information on both the prevalence of psittacosis among birds and man, and the quarantine regulations in force.

A summary of the available information has been prepared by the Secretariat². This will be sent to national health authorities

¹ A. T. Shousha Pasha, Schistosomiasis, a World Scourge, Government Press, Cairo, 1947.

² Doc. WHO.IC/EQ/19, 14 August 1947.

with a request for data on the present situation regarding the disease and protection measures applicable.

INTERNATIONAL ACTION AGAINST ALCOHOLISM

Dr. André CAVAILLON had drawn the attention of the Interim Commission at a previous session to the problem of the world-wide increase in alcoholism, and at the recent session he presented a memorandum on this subject.

After emphasizing the importance of alcoholism as a social and health problem, the author outlined the measures taken in various countries, and gave details of the legal and other aspects of the struggle against alcoholism in France. In his conclusions, Dr. Cavaillon expressed the opinion that WHO should attach particular importance to the problem of education, and that the fight against alcoholism should begin in the primary school and be pursued steadily, but without over-emphasis, throughout every phase of educational life. He thought that the World Health Organization should also advocate increasing the time devoted to the teaching of the pathology of alcoholism in the Medical Faculties, should sponsor congresses, post-graduate courses, etc., and should establish relations with non-governmental international organizations which are working on the same problem.

Such a programme as Dr. Cavaillon visualized could, he believed, be more easily carried out with the co-operation of the specialized agencies such as FAO, ILO, UNESCO, etc.

Important though these proposals were, they should, however, be regarded as only one part of the international campaign against alcoholism. The principal part of Dr. Cavaillon's plan lay in an International Agreement to be concluded by all countries, and such an agreement has been tentatively outlined by him in 57 articles.

The memorandum is intended merely as a basis of discussion for a proposed International Conference against Alcoholism, after preliminary study and, if necessary, modification by a competent group of experts. It was suggested that the Secretariat provide additional data with regard to:

- (i) The physiological and pathological action of alcohol;
- (ii) The social effects of alcoholism;
- (iii) Steps for the restriction of alcohol;
- (iv) Steps for social protection against alcoholism.

The Interim Commission agreed that the Secretariat should continue the study along these lines, and decided to call the attention of the World Health Assembly to the problem.

World Production of Insulin

The problem of world production of insulin was again discussed by the Interim Commission. In accordance with a decision of the Interim Commission, the Secretariat had sent to the appropriate authorities of all United Nations Members and to 14 other States, a circular letter asking them to provide information on several points, including the present consumption and the present production in the respective country, as well as the anticipated consumption and production over the next ten years.

Twenty-five replies had been received by the Secretariat up to 31 July, and it is hoped that when all have arrived a clear picture of the world needs and production possibilities of insulin will be obtained.

FUTURE OF THE INTERNATIONAL CENTRE OF SALMONELLA

In 1938 an International Salmonella Centre, under Dr. F. KAUFF-MANN was established at the State Serum Institute, Copenhagen. At the meeting of the experts on Biological Standardization which took place in Geneva in June 1947, it was proposed that this Centre, which had performed very useful and important work, should be taken over by the World Health Organization and that its scope be extended, under the name of International Enteric Centre, to include dysentery, coliform and Proteus groups of bacilli. The first part of this proposal was adopted by the Expert Committee and submitted to the Interim Commission. After discussion it was decided that, although the Commission was appreciative of the work of the Centre and of its international importance, it was not in a position at the moment to meet the financial obligations involved in taking over the Centre. It was therefore agreed that the matter should be referred to the First World Health Assembly for decision.

¹ See WHO Chronicle, 1, 5-6, p. 81.

THE DANGER OF POST-VACCINAL ENCEPHALITIS

The attention of all Governments is to be drawn by the Interim Commission to the fact that the danger of post-vaccinal encephalitis increases with the age of the children vaccinated, and that primary vaccination is therefore indicated in the early months of life.

Facts and figures provided by Drs. A. CAVAILLON (France), M. MACKENZIE (United Kingdom), A. T. Shousha Pasha (Egypt) and C. VAN DEN BERG (Netherlands) were presented, together with material concerning many other countries, in a memorandum prepared by Dr. G. STUART, member of the Secretariat of the Interim Commission.¹

It appeared, from figures quoted, that in the Netherlands, for example, between 1930 and 1943, in 602,069 subjects vaccinated, 78 cases of post-vaccinal encephalitis occurred, of which 24 were fatal. So great was the fear of the complication in 1936 that 1,500,000 children under 6 years old had not been vaccinated—only 20 per cent. of the school-children at that time were vaccinated. In England and Wales, during the six years of war, 60 cases, with 31 deaths, occurred, giving a case fatality-rate of over 50 per cent.

Geographical distribution of encephalitis throughout the world is uneven, for whereas in certain countries its morbidity and mortality are comparatively high, in others, such as the U.S.S.R., Roumania and France, where primary vaccination is compulsory within the first year of life, the disease is practically non-existent.

The available observations tend to show that post-vaccinal encephalitis results from the stimulation by vaccinia virus of encephalitis virus, pre-existent in a latent form.

It is obviously desirable to obtain more data of the circumstances under which the disease occurs, as verification of the above theory would point to the possibility of practically eliminating post-vaccinal encephalitis by practising smallpox vaccination in the early months of life—i.e., prior to infection by the encephalitis virus.

MEDICAL EXAMINATION OF IMMIGRANTS

A request was received from the Venezuelan Government for assistance by the Interim Commission in the issue of medical certificates to immigrants to that country. It was explained that,

¹ Doc. WHO.IC/EQ/16, 15 July 1947.

while the Government of Venezuela was anxious to receive immigrants, it was highly desirable that they be medically examined before leaving their countries of origin, a task which the Government was unable to fulfil as it could not send doctors and equipment to Europe. The Commission decided that, although financial aid could not be given, the Secretariat should render all possible assistance in the problems arising from the medical examination of migrants.

PREVENTION OF CRIME AND THE TREATMENT OF OFFENDERS

The Social Commission of the Economic and Social Council ¹ at its first session in 1947 asked the Secretariat of the United Nations to prepare a report on the prevention of crime and the treatment of offenders "showing which suggestions are suitable for international action, and how they should be carried out". The report was submitted to the Social Commission during its second session held in Lake Success from 28 August to 13 September 1947. At the same time, the United Nations Secretariat asked the Interim Commission to co-operate actively in certain phases of the work, particularly in the question of the influence of morbid heredity and bad social environment. It was further suggested that UNESCO and WHO should co-operate in a study of early social adaptation in the child and possible preventive measures at this stage of development.

The Interim Commission authorized the establishment of the machinery necessary to provide the help requested.

WHO TECHNICAL ADVICE ON UNITED NATIONS BUILDINGS AND WORKING CONDITIONS

The Secretariat of the United Nations approached the Interim Commission for expert advice on the hygiene of working conditions in the new United Nations buildings, on setting up medical standards for employment and on the United Nations Clinic at Lake Success. The Interim Commission authorized the appointment of a small panel of experts to deal with these questions.

¹ The details concerning the Social Commission in WHO Chronicle 1, 3-4, Annex III.

THE UNITED NATIONS-WHO DRAFT AGREEMENT APPROVED

A joint meeting of the Committee on Negotiations with the Specialized Agencies of the Economic and Social Council and the Sub-Committee on Negotiations with the United Nations of the Interim Commission was held on 4 August at Lake Success. The Interim Commission was represented by Drs. H. VAN ZILE HYDE, W. A. TIMMERMAN and Szeming Sze. Dr. F. CALDERONE, Director of the New York Headquarters Office, and Mr. W. SHARP, technical officer, also participated. The joint Committee considered the Draft Agreement, which had been previously discussed by the Secretariat of the United Nations and WHO. A small number of minor changes were suggested.

The Draft Agreement was then presented to the Economic and Social Council, which approved it during its fifth session, and to the Interim Commission, which also approved it during its fourth session. Before coming into force, the Draft Agreement needs final adoption by the General Assembly of the United Nations and the World Health Assembly.

TIME AND PLACE OF THE FIRST WORLD HEALTH ASSEMBLY

One of the main items on the Agenda was the subject of the time and place of the First World Health Assembly. There was a general feeling among Representatives that the 26th ratification by a United Nations Member would be received before the end of the year, and that it would thus be possible to convene the Assembly in May or June 1948. A long discussion was necessary before a decision with regard to the place could be taken, as a number of important factors had to be considered: the facilities for the efficient organization of the Conference by the Secretariat, the necessity for keeping the expenses as low as possible, and the desirability of enabling those countries which had suffered during the war to send the necessary delegations. The Interim Commission finally decided by a secret vote of 11 to 4 that the Assembly should be held in the Western Hemisphere, Dr. Stampar, the Chairman of the Commission, being authorized to select the specific site in North or South America. Four places were mentioned during the discussion: New York and Geneva (both of which present considerable advantages as the languages

¹ Doc. United Nations E/541, 8 August 1947 (English-French).

of the countries are the working languages of the United Nations, and as they are respectively the site of the Headquarters and of the European Office), Rio de Janeiro, which was proposed by Dr. Geraldo DE PAULA SOUZA, and Paris, proposed by Dr. André CAVAILLON.

FIELD SERVICES

An account of the work of the Field Services Division has previously been given ¹ and the report of its activities between the third and fourth sessions, including a special report on the progress of the fellowships programme, was adopted by the Interim Commission.

It will be remembered that UNRRA had given \$1,500,000 to finance Field Services until the permanent establishment of WHO. Owing to the delay in ratifications, the Executive Secretary approached the Central Committee of UNRRA for a further grant to allow the Interim Commission to continue to afford technical assistance in health matters to UNRRA-aided countries until the World Health Assembly meets. Information was received immediately after the close of the fourth session that the Central Committee of UNRRA had generously allocated a further \$1,500,000 for this purpose to the Interim Commission for the first nine months of 1948 or until the permanent WHO is independently and adequately financed.

BUDGET FOR 1948

The total WHO budget for the year 1948 as determined by the Interim Commission amounts to \$3,028,324. This sum is regarded as the minimum necessary to keep the WHO machinery functioning and to meet the cost of the numerous activities to which the Interim Commission is now committed. Many proposals already submitted to the Commission have had to be postponed or curtailed to keep the budget to this low level and thus reduce the contributions which will have to be provided by the Member Governments.

Of the total budget, \$1,500,000 have been allocated to the Field Services. The Sub-Committee on the Field Services Budget will meet in January 1948, before the fifth session of the Interim Commission, to prepare the detailed budget for the Field Services.

¹ WHO Chronicle, 1, 5-6, p. 73.

The remaining allocations fall into several categories:

- (a) \$303,900 for Organizational Meetings, including the First World Health Assembly (\$200,000), one or more meetings of the Interim Commission, and several meetings of the Committee on Administration and Finance, of the various sub-committees of the Committee on Relations and of the Negotiating Committees with other Specialized Agencies.
- (b) \$125,000 for Technical Meetings, including Quarantine (2 meetings), International Epidemic Control (2 meetings), Malaria (2 meetings), Habit-forming Drugs (2 meetings), Biological Standardization (2 meetings), International Lists of Diseases and Causes of Death (1 or 2 meetings), Joint
- Expert Committees (3 meetings), Tuberculosis (1 meeting), Unification of Pharmacopæias (2 meetings), and Venereal Diseases (1 meeting).
 - (c) \$132,200 for Technical Services including Biological Standardization, Laboratories, epidemiological telegrams, publications, etc.
- (d) \$807,224 for New York, Geneva and other Offices.
- (e) \$160,000 as a contingency fund.

MISCELLANEOUS

ICEF-WHO Co-operation.

The Chairman of the Interim Commission and the Executive Secretary were authorized to appoint, for assistance to the International Children's Emergency Fund, a public health officer, and later, if necessary, a nutritionist and a specialist in child welfare for the same purpose.

Committee on Technical Questions.

The Interim Commission decided to change the name of the Committee on Epidemiology and Quarantine to the Committee on Technical Questions and to widen its terms of reference to the tendering of advice on all technical proposals referred to it by the Commission.

Committee on Priorities.

The terms of reference of the Committee on Priorities were

limited to the tendering of advice on the relative importance of questions of policy and programme referred to it by the Commission.

The Sanitary Bureau in Alexandria.

The Chairman of the Interim Commission was authorized to appoint a small Sub-Committee to study, in consultation with the appropriate authorities, the relationship of the Sanitary Bureau in Alexandria to the World Health Organization.

Yellow Fever Panel.

An expert from the U.S.S.R. will be added to the Yellow Fever Panel.

Malaria.

Médecin-général M. A. VAUCEL (France) and Dr. A. K. VISHWANATHAN (India) were appointed as members of the Expert Committee on Malaria.

FORTHCOMING MEETINGS

The Interim Commission will hold its fifth session at the Palais des Nations, Geneva, from 22 January to 7 February 1948.

The Sub-Committee on the Field Services Budget will meet in Geneva on 16 January 1948.

The Committee on Administration and Finance will meet in Geneva on 19 January 1948.

Technical Meetings.

The Expert Committee for the Preparation of the Sixth Decennial Revision of the International Lists of Diseases and Causes of Death will meet at the Palais des Nations, Geneva, from 21 to 26 October 1947.

The Expert Committee on Quarantine will meet at the Palais des Nations, Geneva, on 24 November 1947.

The Expert Committee on Malaria will meet in Washington, D.C., some time in May 1948. The precise place and date of the meeting will be announced later.

Annex I.

LIST OF PARTICIPANTS AT THE FOURTH SESSION OF THE INTERIM COMMISSION

- Dr. Andrija Stampar, President of the Yugoslav Academy of Sciences and Arts, Professor of Public Health, University of Zagreb, Yugoslavia. *Chairman*. *Representative*.
 - Dr. Paul Gregoric, Member of the Government of the People's Republic of Croatia. Alternate.
- Dr. Geraldo H. De Paula Souza, Director of the Faculty of Hygiene and Public Health, University of São Paulo, Brazil. Vice-Chairman. Representative.
- Dr. Aly Tewfik Shousha Pasha, Under-Secretary of State, Ministry of Public Health, Cairo, Egypt. Vice-Chairman. Representative.
- Dr. P. Z. King, Vice-Minister of Health, Nanking. Representative.
- Dr. Szeming Sze, Resident Representative, National Health Administration of China, Washington, D.C., United States of America. *Vice-Chairman. Alternate*.
- Dr. George D. W. Cameron, Deputy Minister of National Health and Welfare, Ottawa, Canada. Representative.
 - Dr. Thomas C. Routley, General Secretary, Canadian Medical Association, Toronto. Alternate.
 - Dr. M. R. Bow, Deputy Minister, Department of Public Health, Province of Alberta. Adviser.
 - Dr. Léon Gerin-Lajoie, Professeur et Vice-Doyen, Faculté de Médecine, Université de Montréal. Adviser.
 - Mr. John G. H. Halstead, Third Secretary of the Department of External Affairs, Ottawa. Adviser.
- Dr. Demetrio Castillo, Assistant to the Director of Public Health, Caracas, Venezuela. Alternate.
- Dr. André Cavaillon, Directeur général de la Santé, Ministère de la Santé publique et de la Population, Paris, France. Representative.
 - Dr. Xavier Leclainche, Inspecteur général au Ministère de la Santé publique, Paris. Alternate.
 - Médecin-général M. A. VAUCEL, Directeur du Service de Santé au Ministère France Outre-mer, Paris. Alternate.

- Dr. Lucien BERNARD, Chef du Bureau d'Epidémiologie, Ministère de la Santé publique et de la Population, Paris. Adviser.
- Mme. C. Labeyrie, Ministère des Affaires Etrángères, Paris-Adviser.
- Dr. Karl Evang, Surgeon-General, Department of Public Health, Oslo, Norway. Representative.
- Dr. Melville D. Mackenzie, Principal Medical Officer, Ministry of Health, London, United Kingdom. Representative.
 - Dr. A. M. W. RAE, Colonial Office, London. Alternate.
 - Mr. Maurice E. BATHURST, Foreign Office, London. Adviser.
 - Mr. C. H. K. EDMONDS, Assistant Secretary, Ministry of Health, London. Adviser.
 - Miss Kathleen V. GREEN, Ministry of Health, London. Adviser.
- Lieut.-Colonel C. Mani, I.M.S., Deputy Public Health Commissioner with the Government of India, New Delhi, India. Representative.
- Dr. Thomas Parran, Surgeon-General, United States Public Health Service, Washington, D.C., United States of America. Representative.
 - Dr. H. VAN ZILE HYDE, Senior Surgeon, United States Public Health Service, Washington, D.C.
 - Mr. Howard CALDERWOOD, State Department, Washington, D.C. Adviser.
 - Mr. Samuel T. Parelman, Chief, International Organizations Branch, Office of Budget and Planning, State Department, Washington, D.C. Adviser.
- Dr. Carlos E. Paz Soldán, Professor of Hygiene, Faculty of Medicine, University of San Marcos, Lima, Peru. Representative.
- Dr. George Muir Redshaw, Chief Medical Officer, Australia House, London. Representative.
- Dr. C. VAN DEN BERG, Director-General of Public Health, Ministry of Social Affairs, The Hague, Netherlands. Representative.
 - Dr. W. A. TIMMERMAN, Director of the National Institute of Public Health, Utrecht. Alternate.
 - Dr. C. Banning, Chief Medical Inspector of Public Health, The Hague. Alternate.
 - Mr. C. J. GOUDSMIT, Health Department, Ministry of Social Affairs, The Hague. Adviser.

Dr. Nicolai Vinogradov, Vice-Minister of Health, Moscow, U.S.S.R. Representative.

The following were present as Observers:

UNITED NATIONS:

- Mr. Louis Gros, Executive Assistant, Department of Social Affairs.
- Dr. Antonio Pons, Acting Director, Health Section, Department of Social Affairs.
- M. Léon Steinig, Director, Narcotics Division, Department of Social Affairs.

FAO:

- Dr. W. R. AYKROYD, Director, Nutrition Division.
- Dr. J. M. LATSKY, Nutrition Executive.

ICAO:

M. Eugène Pepin, Chef des Etudes juridiques.

ICEF:

Mr. Alfred E. Davidson, Director, European Headquarters.

ILO:

M. Henri Gallois, Conseiller, Assistant spécial du Directeur général du B.I.T.

IRO:

Dr. R. L. COIGNY, Director of Health.

Office International d'Hygiène Publique :

- Dr. M. T. Morgan, President of the Permanent Committee.
- Dr. L. M. GAUD, Président de la Commission des Finances et du Transfert.

UNESCO:

- M. André DE BLONAY, Head of Section, External Relations.
- Dr. I. M. Zhukova, Counsellor, Section of Natural Sciences.

Secretariat:

- Dr. Brock Chisholm, Executive Secretary.
- Dr. Raymond Gautier, Counsellor, Chief of the Geneva Office.
- Dr. Frank Calderone, Director of Headquarters Office.

2035 A., 2025 F., 10/47 Imprimerie de «La Tribune de Genève».



CHRONICLE OF THE WORLD HEALTH ORGANIZATION

VOL. I, No. 10

October 1947

CHOLERA IN EGYPT

The present cholera epidemic in Egypt is a test of the efficiency of modern public health organization. There is reason to believe that a century ago a similar epidemic could not have been checked and would have claimed numerous victims in parts of Europe. The history of the five epidemics which during the 19th Century used Egypt as a stepping-stone, fully confirms this supposition.

The cholera epidemic made its first appearance on 22 September 1947, in El Kurein (Elkarin) village, Sharkyia Province. As soon as this news reached the Epidemiological Intelligence Service of WHO, notifications of the outbreak in Egypt were sent to all countries liable to infection from travellers coming from Egypt by air, land or sea. This prompt action enabled the Governments concerned to take protective measures without delay.

All countries adjacent to Egypt and those connected with her by airlines took defensive measures against the importation of the disease: some of those taken were even more drastic than those laid down by the International Sanitary Conventions now in force. One country even went to the length of completely closing its frontiers to persons coming from Egypt. Such a measure, understandable as it is during the early stages of an epidemic outbreak in a neighbouring country, would defeat the very object of the International Sanitary Conventions if permitted to remain in force for any length of time, as it would only provoke clandestine violation of the frontier and the illegal entry of individuals who would thus escape all sanitary control.

Statistical details with a description of the epidemic and the sanitary measures taken by the Egyptian Government are set out in the WHO Weekly Epidemiological Record (Nos. 40, 41 and 42) and in a statement by Dr. Nazif Bey, Under-Secretary of State for Quarantine, Egypt (doc. WHO.IC/Q/12).

The sanitary measures taken to localize the outbreak are summarized as follows:

- 1. Isolation of patients in fever hospitals and isolation camps.
- 2. Immediate disposal of rubbish or other fly-breeding sources by burning, and then spraying the inside and outside of dwellings with D.D.T. solution.
- 3. Disinfection of houses of sick and suspected cases.
- 4. Isolation of contacts of patients and observation of the inhabitants of infected villages.
- 5. Immediate inoculation of contacts, followed by mass inoculation of the entire population of infected or threatened villages.
- 6. Control of the purity of the water supplies and the protection thereof.
- 7. Prohibition of the sale of refreshment, cold drinks and any food or fruit suspected of contamination.
- 8. Closure of public fountains destined for public use as well as wells and tanks exposed to the risk of contamination, even if they belong to individuals.
- 9. Closure of public swimming-pools.
- 10. Prohibition of the mooring of boats in an area within 500 metres from the boundaries of any town situated on the banks of the Nile or a canal. Such boats will not be allowed to approach the shore in such areas.
- 11. Closure of any public kitchen or any kitchen belonging to restaurants or cafés, if after a 24-hour warning issued by the Medical Authorities to its owner or manager the establishment was still found in a state liable to facilitate the contamination of the food or drinks prepared or served in that establishment.
- 12. Closures of latrines and cesspits which would be found in the following conditions:
 - (a) in the neighbourhood or inside public kitchens or cafés or restaurants, and, as a general rule, in any place where food or drinks are prepared for the use of the public, if such W.C., tanks or latrines in view of their state may facilitate the contamination of food or drinks prepared or served;
 - (b) in workshops or factories, if such W.C., latrines or cesspits are not in a satisfactory state of cleanness.

- 13. Closure of any drain or W.C. connected with the Nile or with any canal or pond.
- 14. Closure of any aerated water or ice-factory or any dairy liable to be dangerous to public health.
- 15. Prohibition of open praying-places situated on the banks of the Nile or any canal, or in the neighbourhood of any well.
- 16. Prohibition of washing clothes or bathing in the Nile or in any
- 17. Prohibition of drawing water from any sources other than those approved by the sanitary authorities.
- 18. Prohibition of fairs or public markets.
- 19. Prohibition of washing vegetables destined for sale in any places other than those appointed by the sanitary authorities.
- 20. Chlorination of water taken from rivers and canals in the infected areas.
- 21. Prohibition of navigation in Ismailia Canal.
- 22. Prohibition of bus traffic between Cairo suburbs and the infected villages.
- 23. Abolition of stopping of trains at stations between Ismailia and Cairo, Zagazig excepted.
- 24. Suppression of outgoing movement of pilgrims from Egypt.
- 25. Closure of out-patient departments in all Ministry units in the infected provinces.
- 26. Installation of sanitary water pumps for water supply in the infected districts.
- 27. Control of traffic between infected and non-infected areas by all routes.
- 28. Increase of the amount of chlorine, 1 part per million, in the waterworks of all towns and cities.

To enable the health authorities of Egypt to carry out a vaccination campaign—an essential measure in the fight against the epidemic—the WHO Secretariat was authorized to spend a considerable sum of money in the purchase of vaccine, offered to the Egyptian Government immediately news of the epidemic outbreak reached Europe. During the days that followed, Egypt received considerable quantities of vaccine from the U.S.S.R., the United States, the United Kingdom, Iraq, France, Switzerland, Tunisia, Brazil, Iran and Italy.

Contacts and suspected cases were vaccinated first, and the practice was later extended to the whole population of the infected and threatened areas.

The energetic measures taken by the Egyptian Government as well as the steps taken by other Governments to secure international protection, confined the epidemic during its first weeks to a relatively small area covering the provinces in the Nile Delta, more particularly Dakahlyia, Sharkyia and Kaliubyia. ¹² Fear of cholera has given rise to rumours of cases in a number of countries closely or remotely connected with Egypt — rumours reported in several cases by the Press. The competent health authorities of Saudi Arabia, Palestine and Italy have emphatically denied the presence of cholera in any part of their territory. Egypt is therefore the only country west of India where cholera is now present.

A meeting of the Expert Committee on Quarantine, announced for 24 November, was summoned earlier so that the cholera epidemic, the measures taken and some technical problems involved might be studied immediately.

The experts met on 13 October and heard a comprehensive statement by Dr. NASIF Bey on the development of the Egyptian cholera epidemic. The origin of the epidemic was discussed at length.

It was impossible to determine with certainty how the cholera vibrio had found its way into the country which had been free from cholera since 1903. The disease could not have been imported by pilgrims returning from Mecca, which in the past was the traditional way by which cholera entered the country, as the Pilgrimage does not take place until later in the year. To prevent the disease from spreading to other parts of the world, 15,000 Egyptian pilgrims who were preparing to leave for Mecca were prevented from sailing. Foreign pilgrims were allowed to proceed by ship through the Canal in quarantine, medical inspections being carried out at Port Said and Suez. Foreign pilgrims in transit who reached Egypt by air were allowed to proceed on the seventh day following cholera vaccination.

¹ On 16 and 17 October, respectively, cases of cholera were reported from the provinces of Kena and Beni Suef (Upper Egypt).

² The total number of cases for the four weeks from 23 September to 20 October (provisional figures) works out as follows:

⁵²³ cases and 156 deaths 23-29.IX: 29.IX.-6.X: 889 378 1,303 551 7-13.X: 2,075 14-20.X: 4,566)) 7.281 » 3,160 Total: >>

Another problem discussed by the experts was the use of vaccine. The vaccines received by Egypt from the various countries appeared to differ appreciably in concentration. It is common practice to inject 12 billion 1 germs in two doses, the first of 4-5 billions and the second of 7-8 billions. As the strain of cholera vibrio used for the various preparations of vaccines is not identical, some vibrios being three times larger than others, it follows that the various types of vaccines do not contain the same number of germs per c.c., for if they did they would vary considerably in concentration, some being fluid and others thick. Moreover, mice will withstand the injection of 4 billion vibrios of some strains, but will die if injected with only 2 billions of another. The Egyptian health authorities were confronted with a difficult problem, and being in need of large quantities of vaccine, they had to use preparations coming from various countries and requiring different methods of application. This served to emphasize the urgent need to standardize the vaccines, and the question was therefore referred to the WHO Expert Committee on Biological Standardization.

The quarantine measures to be adopted by threatened countries were also discussed. The experts unanimously agreed that the provisions of the International Sanitary Conventions were in every way adequate, ² and emphasized the fact that Article 15 of the 1926 and 1944 Maritime Convention could not be construed as empowering countries to enforce quarantine measures more rigorous than those laid down by the Conventions which call for:

- (a) surveillance for travellers adequately protected by vaccination;
- (b) surveillance and medical examination for those who have not been vaccinated.

Medical examination for suspected cases enables health authorities to subject such cases to any supplementary investigation that may be required, including bacteriological examination of stools, and observation.

¹ Billion is here used in the French and American sense of one thousand millions.

² See Articles 29 to 34 of the International Sanitary Convention, 1926, as amended by the International Sanitary Convention, 1944, and Articles 30 to 33 of the International Sanitary Convention for Aerial Navigation, 1933, as amended by the International Sanitary Convention for Aerial Navigation, 1944.

QUARANTINE

First Meeting of the Expert Committee, held at Geneva in October 1947.

As has already been stated, a meeting of the Expert Committee on Quarantine, originally planned for 24 November, was held from 13 to 16 October ¹ so that the cholera epidemic, the measures taken to combat it and some of the problems involved might be discussed by the Experts.

The question of international vaccination certificates was discussed following a protest by the Government of India, concerning a request made by the Hong Kong, Singapore and Malayan Union authorities, that all smallpox vaccination certificates should be countersigned by a medical officer attached to a government or municipal service. The Committee noted that Article 42 of the Maritime Conventions of 1926 and 1944 left it to the authorities of the country of arrival to decide whether or not the traveller had been adequately vaccinated. It was therefore in the interests of the traveller to present a trustworthy certificate. The Experts recommended that health authorities should accept as valid, and consequently as exempting the bearer from further revaccination and quarantine restrictions, the form of "International Certificate", when completed or authenticated by a medical officer in government or municipal service, or in government-approved institutions. This recommendation, if accepted by Governments, would be of great value to the traveller, for, once in possession of a duly authenticated International Certificate testifying that his vaccination has

¹ The following attended this meeting:

Dr. DUJARRIC DE LA RIVIÈRE, Assistant Director of the Pasteur Institute, Paris;

Dr. G. L. DUNNAHOO, Chief of the Foreign Quarantine Division of the United States Public Health Service, Washington;

Dr. G. D. HEMMES, Inspector of Public Health, Utrecht;

Dr. H. E. Mohammed Nazif Bey, Under-Secretary of State for Quarantine, Ministry of Public Health, Egypt;

Dr. P. G. Sτοck, Medical Adviser, Ministry of Health, London (elected Chairman);

Dr. W. W. Yung, Director, Department of Epidemic Prevention, National Health Administration, Nanking.

Secretariat: Dr. Y. BIRAUD, Director, Division of Epidemiology and Public Health Statistics;

Dr. G. STUART, Chief of the Sanitary Conventions and Quarantine Service, Secretary of the Committee.

been successful, he could feel sure that he would not be subjected to revaccination or quarantine restrictions by the health authorities of the port of arrival. The Experts also recommended that even certificates not so authenticated should be accepted, under the terms of Article 42 of the 1926 and 1944 International Sanitary Conventions, although it is recognized that the health authorities of the port of arrival have, in this case, the right to refuse them if they so desire. It was decided that the forms of International Certificates and the question of their endorsement should be referred to the Expert Committee on International Epidemic Control and that the question of their simplification should be considered during the revision of the Sanitary Conventions. The Experts considered that no photograph or fingerprint should be required on certificates when the holder was in possession of a passport or identity card. The certificates might be drawn up both in the language of the issuing country and in one of the official languages of the 1944 Conventions (English or French). The Committee further discussed the possibility of revising the International Certificate of Vaccination against smallpox, particularly with a view to avoiding the terms "reaction of immunity" and "no reaction" which in the past have led to confusion. Dr. Stock proposed that the certificate should consist of three parts, covering respectively:

- I. Vaccination;
- II. Inspection of the results;
- III. Revaccination and inspection of the results in the event of the first vaccination proving unsuccessful.

(In the event of a second unsuccessful vaccination the interpretation of that finding is left to the discretion of the port health authority of the country of arrival.)

The proposed certificate will be submitted to the Interim Commission as amended. If it is approved, the Interim Commission will recommend that Governments recognize and adopt it pending the revision of the International Sanitary Conventions now in force. The Committee was opposed to the issue to persons travelling on urgent business of "Provisional International Certificates" of vaccination and inoculation against pestilential diseases such as was envisaged during the war, as this might entail a complete breakdown of the international system of quarantine protection.

Another question examined was that of inoculation against plague and typhus. The Experts stressed the fact that, under the existing conventions, inoculation against these two diseases could not be required of incoming travellers, and observed that such measures were of little value in the protection of countries receiving travellers from infected areas. In their opinion, disinsectization of the travellers and their belongings by means of D.D.T. or other insecticide was far more efficacious in preventing the importation of these diseases.

The disinfection of aircraft in the event of a true or suspected case of cholera on board was also discussed. This appeared to be a complicated problem if the aircraft is not to be detained at the airports too long, or its fittings damaged. The Secretariat was requested to obtain technical information on the subject. Pending an international agreement on standard methods of disinfecting aircraft, a number of simple routine measures to be taken in case of emergency were recommended.

Inoculation against yellow fever was another problem under consideration. On evidence furnished by the experts of the WHO Yellow Fever Panel, the Committee agreed that infants and young children could be safely inoculated against yellow fever provided that 17-D vaccine was used.

The Committee reviewed the terms of Article 49 of the 1926 and 1944 Conventions and unanimously agreed that, as an effective epidemiological service had now been established by the WHO, bills of health and consular visas should be abolished. The Secretariat was requested to bring this decision to the notice of Governments and to do everything in its power to accelerate the abolition of these obsolete documents.

Finally, the Experts considered the problem of the international testing of yellow-fever vaccine. The Committee approved the recognition by the Interim Commission of a number of laboratories already approved by UNRRA for testing the activity 1 of the yellow-fever vaccine and for its preparation. 2

[Continued on opposite page.

¹Bogota (Colombia), Yellow Fever Laboratories, National Yellow Fever

Dakar (Senegal), Pasteur Institute;

Entebbe (Uganda), Yellow Fever Institute;

Hamilton (Montana, U.S.A.), Rocky Mountain Laboratory (U.S. Public Health Service);

It was agreed that the measures already undertaken by the Interim Commission for the systematic international testing of yellow-fever vaccine should be put into force as soon as possible in order to ensure the maintenance of the activity of all vaccines in international use, to permit the granting of full approval to institutes at present enjoying only temporary approval, and to provide for the addition of other institutes to the list of approved vaccine producing laboratories.

UNIFICATION OF PHARMACOPŒIAS

First Meeting of the Expert Committee held at Geneva in October 1947.

At its third session, the Interim Commission decided to establish an Expert Committee for the Unification of Pharmacopæias. The background to the work of this Committee, which is a continuation of the Technical Commission of Pharmacopæial Experts of the League of Nations, has been described in a previous number.¹

Johannesburg (Union of South Africa), South African Institute for Medical Research;

Lagos (Nigeria), Yellow Fever Research Institute;

London (England), Wellcome Research Institute;

New York (U.S.A.), Laboratories of the International Health Division, Rockefeller Foundation ;

Paris (France), Pasteur Institute;

Rio de Janeiro (Brazil), Yellow Fever Research Institute.

² International Health Division of the Rockefeller Foundation *;

National Institute of Health of the U.S. Public Health Service *;

South African Institute for Medical Research, Johannesburg *;

Wellcome Research Institute, London †;

Yellow Fever Laboratory, Brazilian National Yellow Fever Service, Rio de Janeiro \dagger ;

Yellow Fever Laboratory, Colombian National Yellow Fever Service, Bogota †; Pasteur Institute, Dakar§.

* Fully approved.

† Approved, for the time being, for quarantine purposes.

§ Approved, provided vaccine inoculated by the scarification method of the Dakar Pasteur Institute.

¹ See WHO Chronicle, 1947, 1, 77.

The Expert Committee held its first session in Geneva from 13-17 October 1947.

The Technical Commission of the League of Nations had held its last meeting in May 1939, and the first task of the Expert Committee was to consider the Interim Report of that Commission and, in the light of modern developments in pharmaceutical knowledge and science, to draw up a definitive list of drugs to be included in an International Pharmacopæia, the drafting of the requisite monographs being divided amongst its members. This list was divided into three sections: Section A, the primary list for immediate action comprising those drugs extensively used in modern therapeutics and of essential value to the medical profession; Section B, those drugs not considered as important, for inclusion in a secondary list; while those in Section C were not considered worthy of inclusion. Approximately 250 drugs were listed in Section A, 80 in B and 200 in C.

The main task of the Committee consisted of the careful examination of draft monographs submitted by members which were adopted with minor alterations.

Other matters discussed by the Committee included the possibility of establishing an international nomenclature for new drugs; and the standardization of surgical sutures, dressings, etc.

Amongst its recommendations to the Interim Commission were that, to give a broader international representative opinion, the Committee should be increased by at least three members, and that negotiations should be undertaken to establish a single International Secretariat for Pharmacopæias under the ægis of the WHO or of its Interim Commission.

It is the hope of the Expert Committee that the first draft of the International Pharmacopæia may be published in the course of 1948.

¹ The following members attended:

Professor H. Baggesgaard-Rasmussen, Chairman of the Chemical Division of the Danish Pharmacopæia Commission;

Professor I. R. Fahmy, Professor of Pharmacology, Faculty of Medicine, Cairo; Professor E. Fullerton Cook, Chairman of the Committee of Revision of the United States Pharmacopæia;

Dr. C. H. Hampshire, Secretary of the British Pharmacognosy Commission (elected Chairman);

Professor R. HAZARD, Professor of Pharmacology and Materia Medica at the School of Medicine, Paris, was unable to attend owing to illness.

Secretariat: Dr. W. Bonne, member of the Secretariat of the Interim Commission.

TUBERCULOSIS

First Meeting of the Expert Committee held in Paris in July-August 1947.

The Expert Committee ¹ on Tuberculosis met in Paris from 30 July to 2 August 1947 and discussed the practical means of attacking the disease on an international level. The experts presented their conclusions in a report ² to the Interim Commission at its fourth session held at Geneva in September; but it was decided that the recommendations contained in the report should be further considered by the Members of the Commission prior to the next session.

It was nevertheless agreed that the Executive Secretary be authorized to establish, as an emergency measure, two or three small demonstration teams, to be sent at the request of countries in which tuberculosis had assumed epidemic proportions, to carry out B.C.G. vaccinations. A demonstration team will normally consist of a doctor, a laboratory assistant and a nurse.

It was further agreed that the contradictory reports received from clinical workers with regard to the therapeutic value of streptomycin in tuberculosis justified the convening of a conference of experts in the near future. A number of workers with wide personal experience in the clinical use of the drug or its production will be invited to discuss the hopes and fears which arise from the use of streptomycin in the various forms of tuberculous infection. The next meeting of the Expert Committee on Tuberculosis will be held in February at Geneva.

¹The Expert Committee comprised:

Dr. P. D'ARCY HART, Medical Research Council, London;

Dr. Herman HILLEBOE, United States Public Health Service;

Dr. Johannes Holm, State Serum Institute, Copenhagen (elected Chairman), Secretary: Dr. J. B. McDougall, member of the Secretariat of the Interim Commission.

² Doc. WHO.IC/95, 8 August 1947.

THE HOUSING PROBLEM

One of the most difficult problems of the post-war world is that of housing. Not only have numerous dwellings been destroyed during hostilities, but the great economic depression of 1929 caused a slowing-up or indeed complete stagnation in the building programmes of certain countries.

The present overcrowding of dwellings has gravely affected the morale and also the state of health of a large proportion of the urban population. Indeed, it is impossible to combat with any measure of success tuberculosis and other infectious diseases while living conditions fall so far short of the requirements of hygiene. The housing problem concerns not only the architect, the engineer and the economist, but also the public health specialist. It is not sufficient to find the material and labour wherewith to build dwellings on a large scale; a knowledge of the physiological conditions essential to a healthy life is also required.

It is in this latter field that the Health Section of the League of Nations broke new ground. It collected valuable documentary evidence ¹ on the living conditions of rural and urban populations in certain areas of Europe and of other continents, and in 1935, set up a Housing Commission. This body met several times and endeavoured to define sanitary standards indispensable for adequate housing in various regions, taking into account the variations in customs and climate.

An entire range of standards and principles were laid down,² especially dealing with hygiene of the environmental conditions in dwellings (temperature, humidity, movement of the air, etc.), space, noise, natural and artificial lighting, sunshine, water supplies, sewage and methods of disposing of household refuse, etc.

The war interrupted the work of the Housing Commission, but the need of a scientific and economic solution of the housing problem is now more urgent than ever. Several United Nations bodies, as well as several specialized agencies, have endeavoured since the end of hostilities to assist in the solution of the problem. The Emergency Economic Committee for Europe (EECE), in August 1946,

¹ See complete bibliography of the works published by the Health Section on the housing question in the Bulletin of the Health Organization, 11, 1945.

² See Reports of the Housing Commission in the Bulletin of the Health Organization, 4, August 1937, and 8, 4-5, 1939.

set up a Sub-Committee to study urgent housing problems. The Economic Commission for Europe (ECE), which is a branch of the Economic and Social Council of the United Nations, later carried on EECE's task. Under its ægis a new "Housing Group" was formed, with instructions to make recommendations to the ECE. This group, which consists of representatives of 28 States, met at Geneva on 1-3 October 1947. During this session, a permanent body was formed whose task it will be to direct the ECE's attention to the technical and economic means required to supply effective aid to member States.

The discussions showed a definite desire for effective action, chiefly economic, to further the rapid building of dwellings in Europe. A special session was devoted to a debate on co-operation with other institutions. Dr. Yves BIRAUD, who represented the Interim Commission of the WHO as an observer, formally offered the closest co-operation. He pointed out that contact at an early stage in the work between physiologist and sanitary engineer on the one hand and building technicians on the other, would make it possible not only to safeguard the sanitary standards essential to public health, but might also result in a simplification of the building regulations in force with a consequent speed-up of building. Dr. Biraud recalled that the WHO must, under the terms of its Constitution, "promote, in co-operation with other specialized agencies where necessary, the improvement of ... housing ". He further observed that the Interim Commission had officially expressed its desire that the WHO should be adequately represented in all international work on housing and town-planning. It was also hoped that a group of experts might be formed within the WHO to carry on the task of the Housing Commission of the League of Nations Health Section and to supply the "Housing Group" with all the necessary technical information in the field of hygiene and sanitation.

WHO PUBLICATIONS

Epidemiological and Vital Statistics Report.

Knud Stowman, WHO epidemiological consultant, gives in Vol. 1, No. 4, of the *E.V.S.R.*, a picture of the incidence of diphtheria throughout the world since the beginning of the war.

A diphtheria pandemic spread over Europe during the last ten years, possibly because artificial immunization was not employed on an adequate scale. This was mainly due to a false sense of security which developed after the rapid decline of the diphtheria prevalence in the 1930's. Over 150,000 people whose lives might have been saved were killed by the disease.

The main focus of the last diphtheria epidemics was in Northern Germany. When the war broke out, the diphtheria incidence in that country, in which vaccination for children was not compulsory, had been increasing for nearly fifteen years. In 1939, the number of diphtheria cases in the "Altreich" amounted to 150,000, and the mortality rate to 5 per cent. In 1942, there were 237,000 cases. Four years later 153,000 diphtheria cases were reported in the American, British and French zones. It is estimated that in the entire German territory for the year 1946 there were possibly 230,000 cases or about the same number as in 1942-1944.

Bohemia-Moravia and Austria formed part of the Central-European areas of high diphtheria incidence during the pre-war years. At the present time the diphtheria incidence in these regions is at the same level. Hungary instituted a regular vaccination campaign, and was therefore not affected by the Central-European epidemic during the war. There were 4,927 cases in 1940, 5,947 during the second half of 1945 and 9,576 cases in 1946 as against 14,500 in 1934. In Northern Europe, Sweden and Denmark-countries in which children were vaccinated on a large scale—resisted the diphtheria wave to a certain degree, while Norway and Finland had severe epidemics. From 1941 to 1946, there were 59,566 cases in Norway, compared with 1,813 during the previous six years. The peak came in 1943 with 22,787 cases. An inoculation campaign was then begun and the next year the number of cases fell to 13,547. Finland was not touched by the epidemic until 1943, but 54,297 cases were reported from July of that year to February 1947.

It was in the Netherlands, being nearest to the focus of infection, that diphtheria did the most damage. The epidemic appeared, as in Norway, on the heels of the invaders. During the years 1941-1946 there were 219,772 cases, as against 8,649 during the previous six-year period. Belgium and France, too, had epidemics culminating in 1943, but the incidence was considerably lower than in the Netherlands. In Switzerland there were 5,302 cases in 1946, a slightly higher figure than during the preceding years. Mediterranean

Europe was hardly affected by the pandemic. Italy reported from 20,000 to 30,000 cases a year, but practically all were from the northern and central parts of the country. There was, however, a considerable increase in the incidence of diphtheria in the Iberian Peninsula, where 27,474 cases were reported in 1940 as against an average of 1,119 in 1931-1936.

The United Kingdom is in a category by itself. With a 1928-1936 median of about 75,000 cases a year, it could not be considered as a low-incidence area, despite the fact that in 1941 there were fewer than 16,000 confirmed cases and that the incidence is still decreasing.

This decrease may be due to the mass vaccination campaign, to a well-organized health service and an almost complete interruption of communications with the European epidemic areas.

The Pacific area also had its difficulties. In Japan, 77,256 cases were reported in 1945 as against an average of 28,677 a year in 1934-1938 and an increase in incidence of diphtheria was also reported from New Zealand and Manila.

The Americas were not affected by the diphtheria pandemic to any great extent.

Diphtheria, during the second world war, became the most important epidemic disease in all that part of Continental Europe where the spread of the disease was not prevented by climatic (or unknown) causes which past experience has shown to be permanent. Apart from the Soviet Union, Poland and the Balkans, for which numerical indications are absent or inadequate, there were some 600,000 reported diphtheria cases a year in Europe. The aggregate toll of deaths from this cause during the war and immediate post-war years is probably not under 150,000.

It is clear from the summary presented by Mr. K. Stowman that the diphtheria wave is now receding but only slowly. In the above-mentioned area, 336,000 cases were reported in 1946. This is a first indication of a decline in the number of cases after five years.

It is apparent from these data that the epidemic wrought havoc among populations which were not vaccinated and that tens of thousands of lives might have been saved.

Vol. I, No. 4, of the *E.V.S.R.* also contains statistical tables on diphtheria, scarlet fever, measles and whooping-cough.

WHO REPRESENTATION

During the period between 20 September and 20 October the Interim Commission was represented by observers who attended or took part in the meetings of the following organizations:

- General Assembly of the United Nations, Second Session, Lake Success and Flushing Meadows, U.S.A., September.
- Sub-Commission on Statistical Sampling, Lake Success, U.S.A., September.
- First Annual Meeting of the World Medical Association, Paris, September.
- International Children's Emergency Fund, Executive Board, Lake Success, U.S.A., October.
- Panel on Housing Problems (ECE), Geneva, October.
- Meeting for the Co-ordination of the Medical and Biological Abstracting Service (UNESCO), Paris, October.
- International Social Insurance Conference, VIIIth Meeting, Geneva, October.
- Co-ordination Committee of the Economic and Social Council, Lake Success, U.S.A., October.

FORTHCOMING MEETINGS

The Interim Commission will hold its fifth session at the Palais des Nations, Geneva, from 22 January to 7 February 1948.

The Sub-Committee on the Field Services Budget will meet in Geneva on 16 January 1948.

The Committee on Administration and Finance will meet in Geneva on 19 January 1948.

Technical Meetings.

The Expert Committee on Tuberculosis will meet at Geneva, Palais des Nations, some time in February 1948. The precise date will be announced later.

The Expert Committee on Malaria will meet at Washington, D.C., some time in May 1948. The precise place and date of the meeting will be announced later.

2040 A., 2000 F., 1030 Esp., 11/47. Imprimerie de «La Tribune de Genève».

CHRONICLE OF THE WORLD HEALTH ORGANIZATION

VOL. I, No. 11

November 1947

CHOLERA IN EGYPT

Accounts of the commencement and early development of the epidemic, as well as of the anti-cholera measures taken in Egypt, have already been published in the Weekly Epidemiological Record, Nos. 40, 41 and 44, dated respectively 1, 8 and 29 October 1947, and in the WHO Chronicle, Vol. I, No. 10.

Now that eight full weeks (23 September-16 November) have elapsed since the simultaneous occurrence of the first 4 cholera cases at El Kurein in the Delta Province of Sharkiya, it seems desirable to follow the trend of the epidemic during that period.

During the first week, infection spread from its focus in Sharkiya to the neighbouring provinces of Dakahliya, Minufiya and Kalyubiya in Lower Egypt, and to the Canal Ports of Ismailia and Suez.

By the end of the second week, all the Delta Provinces except Beheira had become involved, as well as the governorates (muhafzas) of Cairo, Damietta and the Canal (Port Said to Ismailia) and, despite the stringent measures enforced to avoid such extension, the province of Giza in Upper Egypt.

In the third week, all six Delta Provinces were infected; the governorates of Cairo, Damietta and the Canal continued to record cases; but in Upper Egypt the disease remained confined to Giza.

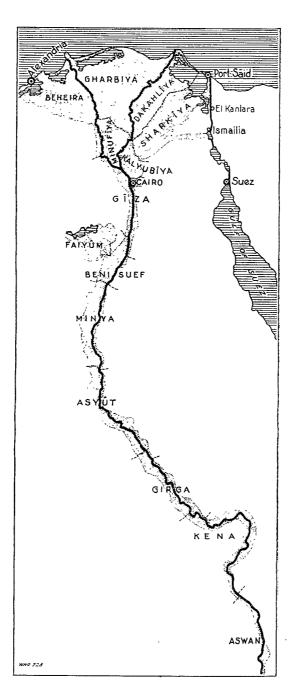
The fourth week saw the curve of incidence rising steeply to attain a 24-hours peak figure of 1,022 cases, with 581 deaths, on its seventh day (20 October). All governorates in Lower Egypt, including Alexandria but excepting Suez, were caught up in the flowing tide of infection; Beni Suef and Kena in Upper Egypt now added their quota to the week's total of 4,566 cases, with 2,057 deaths.

During the fifth week, the epidemic reached its greatest height with

5,976 cases and 2,933 deaths, to which numbers Dakahliya Province, with 367 of its 425 villages stricken, contributed 1,703 cases and 1,128 Alone among deaths. the governorates of Lower Egypt, Suez was cholerafree, but now Asyut in Upper Egypt was among the provinces to which infection had been conveyed.

The sixth week showed the first indications of the epidemic's decline. It was true that during the week all provinces and governorates Lower Egypt were reporting fresh cases and that the disease had by this time made its way into the Faiyum and the Girga Provinces of Upper Egypt, but clearly, in so far as the Nile Delta was concerned, the epidemic had spent its force.

In the seventh week, case numbers decreased daily, with the result that, although, with Minya newly invaded, Upper Egypt retained only Aswan Province without infection, the week's total of 2,218 cases was less than half that of the



previous seven days and little more than a third of the peak figure of a fortnight before. Moreover, of the 4,000 villages considered infected when the epidemic was at its height, only 88 now remained infected.

During the eighth week, when no new areas were infected, the decline in morbidity and mortality alike was continuous—a decline evidenced by the occurrence in the seven days of 750 cases and 505 deaths.

During the eight weeks under review, the epidemic produced 20,877 cases, with 10,265 deaths, thus evidencing a case fatality of 49.16 per cent. Forty-five years ago, when Egypt experienced its last previous cholera epidemic and when all provinces in both Upper and Lower Egypt were involved, there were 40,613 cases and 34,595 deaths—i.e., an apparent case fatality of 85 per cent.

In comparing the 10,265 deaths of the current outbreak, however, with the 34,595 of the 1902 epidemic, it has to be remembered that the present population in Egypt is almost double that of 1902 (10,500,000). The death rate for the 1947 epidemic is therefore seven times less than that for the 1902 outbreak.

In connexion with the present epidemic, it has to be observed that, in spite of repeated re-introduction from villages, the disease has failed to establish itself in any of the towns provided with satisfactory water supplies and adequate sewage disposal systems. It is also noteworthy that, as soon as 80 per cent. of the population had been inoculated with anti-cholera vaccine, over-all incidence began to fall, but whether such decrease can be ascribed to the results of vaccination or to the spontaneous autumnal decline characteristic of each previous cholera outbreak in Egypt it is too carly to say.

The cholera epidemic in Egypt has amply demonstrated the essential rôle of the WHO in meeting a threat to international public health. The first necessity was the mobilization of all the forces, the resources of the WHO itself, of the various national health authorities and of the commercial drug manufacturers, to combat the epidemic in Egypt and to prevent its spread to other countries.

As soon as news of the outbreak was received, the members of the Interim Commission were consulted by cable, and their authorization obtained for the expenditure of contingency funds to meet any emergency that might arise.

The Division of Epidemiology immediately announced the outbreak by cable to all countries connected with Egypt by land, sea and air routes as well as to the WHO epidemiological regional station at Singapore and to the Pan American Sanitary Bureau. The Service, by establishing close contact with the Egyptian health authorities, received daily from them by cable the latest official information on the development of the epidemic. This information, comprising the number of cases and of deaths and their location, was incorporated in the Weekly Epidemiological Record, which was airmailed to all health administrations, seaport and airport authorities, airline medical directors, etc. In addition, health authorities of certain countries in closer contact with Egypt received twice weekly a cabled summary of the available information. A daily cable service was sent, at the special request of its Government, to a country close to Egypt and particularly exposed to contamination. Thus all national health authorities were provided regularly with up-to-date information on the epidemic and enabled to take the necessary quarantine measures. On repeated occasions the WHO Epidemiological Service was able to dispel false rumours concerning the appearance of the disease in this or that country, and thus to prevent unnecessary quarantine measures against countries free from cholera. The WHO also endeavoured to curb measures taken against Egypt which exceeded the International Sanitary Conventions and which were in contradiction to clinical and epidemiological knowledge and to well-established scientific facts regarding the viability of the cholera vibrio. To provide an authoritative opinion, the Expert Committee on Quarantine was urgently convened and met in Geneval from 13-16 October. The adequacy of the measures provided under the existing sanitary conventions was strongly emphasized by the experts. Other findings of the Committee have already been summarized in these columns 1.

For the control of the disease in Egypt and the prevention of its spread, the WHO Secretariat collected information from Governments, institutes and commercial manufacturers on their potential production of cholera vaccine, the time element being paramount. As a result of the concentration of orders in the WHO Secretariat and the ensuing international competition, it was possible to supply promptly the required quantities of vaccine at a greatly reduced cost

¹ See WHO Chronicle 1947, 1, 10, 146

and to direct these to the country whose need was most urgent. Large quantities of essential drugs and medical supplies required by the Egyptian health authorities were also procured and despatched by specially chartered planes. This centralized purchase resulted in a saving for the Egyptian Government estimated at no less than \$125,000.

WHO also provided the Egyptian Government with information on the current methods used for the control of cholera in China and in India. For this purpose, Dr. W. W. Yung, Director of the Department of Epidemic Prevention, National Health Administration, Nanking, and Major P. M. KAUL, Deputy-Director General Health Services i/c Epidemics and Communicable Diseases, Government of India, a new member of the Interim Commission Secretariat, paid special visits to Egypt.

MEDICAL AND VITAL STATISTICS

Second Session of the Expert Committee for the Preparation of the Sixth Decennial Revision of the International Lists of Diseases and Causes of Death.

The second session of the Expert Committee was held at Geneva from 21 to 28 October ¹, in continuation of the work started at the first session in Ottawa, 10-21 March 1947 ². This is the preparation of the International Lists of Diseases and Causes of Death for the final stage of revision, planned to take place in the spring of 1948.

The "International Classification of Diseases, Injuries and Causes of Death" resulting from the Ottawa Session was presented in two volumes:

I. Introduction and List of Categories (a volume of 54 pages) (doc. WHO.IC/MS/1).

This list gives the categories under which all the causes of morbidity and mortality are grouped. The first grouping is one of 17 main

¹ The following attended this meeting:

Julia E. BACKER, Sc.D., Chief, Demographic Section, Central Statistical Office, Oslo, Norway.

S. T. Bok, M.D., Professor of Medicine, University of Leiden, Chief, Section for Statistics, Institute for Preventive Medicine, Leiden, Netherlands.

Dr. F. Denoix, Chief of Service, Institut National d'Hygiène, Paris, France.

W. Thurber Fales, Sc.D., Director, Statistical Section, City Health Department, Baltimore, Maryland, U.S.A. (Vice-Chairman.)

M. Kacpezak, M.D., Director, State Institute of Hygiene, President, National Health Council, Warsaw, Poland.

Percy Stocks, M.D., D.P.H., Chief Statistician (Medical), General Register Office, London, England (elected *Chairman*).

J. Wylle, M.D., D.P.H., Professor of Preventive Medicine, Queen's University, Kingston, Ontario, Canada.

Secretary: Marie Cakrtova, M.D., Dr.P.H., member of the Secretariat of the Interim Commission.

Dario Curiel, M.D., Dr.P.H., Medical Chief, Division of Epidemiology and Vital Statistics, Caracas, Venezuela, was unable to attend.

Adviser: H. L. Dunn, M.D., Ph.D., Director, National Office of Vital Statistics, United States Public Health Service.

Observers: Lucien Feraud, Ph.D., International Labour Organization. Forrest Linder, Chief of the Population Section, Statistical Office, United Nations.

² See WHO Chronicle, 1, 5-6, 85.

sections ¹; each of these contains a number of Categories, amounting to 800 when the injuries are classified according to the "nature of injury" or to 763 when they are classified according to the external cause of injury. Some of the categories designated by three figures are subdivided by the addition of a fourth figure.² But the main emphasis is on the *list of three-digit categories* which is recommended for obligatory use in *classifying* (coding) morbidity and mortality data. The fourth-digit subdivisions are for optional use by countries and agencies interested in further detail.

II. TABULAR LIST OF INCLUSIONS (a volume of 256 pages) (doc. WHO.IC/MS/7).

The content of the categories is implied by the titles and precisely defined by a *Tabular List of Inclusions* which is a list of diagnostic terms grouped under a specific heading. A provisional copy of the Tabular List of Inclusions (doc. WHO.IC/MS/7) resulted from the Ottawa session.

In the interval between the two sessions a third volume of the

- ¹ The Sections are:
- I. Infective and Parasitic Diseases (No. 000-138).
- II. Neoplasms (No. 140-239).
- III. Allergic, Endocrine System, Metabolism and Nutrition Diseases (No. 240-289).
- IV. Diseases of the Blood and Blood-forming Organs (No. 290-299).
- V. Mental, Psychoneurotic and Personality Disorders (No. 300-316).
- VI. Diseases of the Nervous System and Sense Organs (No. 330-398).
- VII. Diseases of the Circulatory System (No. 400-468).
- VIII. Diseases of the Respiratory System (No. 470-527).
- IX. Diseases of the Digestive System (No. 530-587).
- X. Diseases of the Genito-Urinary System (No. 590-637).
- XI. Deliveries and Complications of Pregnancy, Childbirth and the Puerperium (No. 640-689).
- XII. Diseases of the Skin and Cellular Tissue (No. 600-718).
- XIII. Diseases of the Bones and Organs of Movement (No. 720-748).
- XIV. Congenital Malformations (No. 750-759).
- XV. Certain Diseases of Early Infancy (No. 760-770).
- XVI. Symptoms, Senility and Ill-defined Conditions (No. 780-794).
- XVII. Accidents, Poisoning and Violence (N. 800-N. 899, E. 800-E. 899). As has been indicated, a dual system of classification has been adopted for this section, the first based on the nature of injury, the second on the external cause of the injury. In addition there are available two supplementary classifications such as live-births and prophylactic inoculations.

² For example, Category 071 Relapsing fever, is subdivided into : 071.0 Louseborne, 071.1 Tick-borne, and 071.2 Unspecified.

International Classification was prepared, namely the:

III. ALPHABETICAL INDEX (Tentative Edition) (doc. WHO.IC/MS/Index 1).

This task was entrusted to the Sub-Committee for the Preparation of an Alphabetical Index, which combined, in its membership, the knowledge, experience and skill necessary for the fulfilment of this work. An Alphabetical Index, such as is available in tentative form (doc. WHO.IC/MS/Index 1), will serve as a handbook for routine coding of the morbidity and mortality causes contained in the Tabular List as well as of others not indicated in the list. The purpose of the index is to supplement rather than to replace the tabular list. Sole reliance on the index for coding purposes without reference to the Tabular List is to be deprecated, for no proper understanding of the principles underlying the classification can ever be reached in that way and many errors may arise in consequence.

* *

It should be made clear that the International List is not a medical nomenclature, but a classification for the coding of diseases and causes of death. A medical nomenclature is a manual providing authoritative terminology. One of the best known and most widely used is the Nomenclature of Diseases of the Royal College of Physicians of London, which was first published in 1869, and subsequently revised in 1885, 1896, 1906, 1918, 1931 and 1947. This nomenclature has afforded a continual basis of authority in the use of medical terms for British physicians. In the United States several existing nomenclatures, some of which had been used extensively, were unified and published for the first time in 1932. This nomenclature is periodically revised by the American Medical Association under the title Standard Nomenclature of Diseases. A medical nomenclature is a great aid in the statistical registration of diseases, but cannot, because of its very nature, serve as a statistical classification.

¹ The following attended this meeting:

S. D. COLLINS, Ph.D. Head Statistician, United States Public Health Service (elected *Chairman*).

J. T. Marshall, Assistant Statistician, Dominion Bureau of Statistics, Canada.
Iwao M. Moriyama, Ph.D. Biostatistician, National Office of Vital Statistics,
United States Public Health Service.

Winifred O'Brien, Supervisor, Nosology Section, Vital Statistics Branch, Canada.

A.H. T. ROBB-SMITH, M.D. University of Oxford, Great Britain.

In order to enhance the international acceptability of the proposed List, every Government was afforded the opportunity of expressing its views and of suggesting amendments to the Classification.

After the Ottawa session, the list of categories was circulated to 72 Governments and to health administrations, statistical offices and social insurance agencies so as to enable them to make comments and suggestions. Out of a total of 72 governments, 35 have sent their observations to the Secretariat. The Expert Committee had, during its second session, the laborious task of examining all these observations and making the necessary changes in the List. The result of this work is an amended List of Categories, ready to be submitted to the International Conference for the Sixth Decennial Revision.

The Tabular List of Inclusions and the Alphabetical Index will be revised so as to incorporate the changes necessitated by the amendments to the List of Categories.

THE INTERNATIONAL CONTROL OF HABIT-FORMING DRUGS

The Hague International Convention of 1912 focused attention upon the international control of opium and other narcotic drugs. The excessive consumption of narcotics in many countries has long been responsible not only for the growth of vice and crime but for increased mortality and morbidity. From the first attempt to control the abuse of narcotic drugs it was obvious that illegal traffic could be suppressed only by the effective limitation of their production and manufacture, and by the strict control and supervision of international trade. International measures of this nature necessitated action from the medical, as well as from administrative, legal, and other aspects, for many drugs perform essential medicinal and analgesic functions, either in their pure form or in combination with other substances.

The Convention signed at Geneva on 19 February 1925 1 establishing the machinery for the suppression of the drug traffic invested the Council of the League of Nations with the power to recommend to Governments that certain dangerous narcotic drugs should be placed under international control. The Health Committee of the League of Nations was empowered to propose, after consultation with the Office International d'Hygiène Publique, to the Council that any drug which might prove habit-forming should be submitted to international control. Those substances, however, which "are compounded and which in practice preclude the recovery of the said drugs" were exempt. This system ensured that any new habitforming drug could be placed immediately under international control, but when the League of Nations ceased to function, a new situation arose. The responsibility for the international control of narcotic drugs, together with other technical functions, devolved upon the United Nations. On 11 December 1946, a protocol 2 was signed by the Governments represented in the General Assembly, which provided for the transfer of the functions and powers of the Health Committee of the League of Nations and of the Office Inter-

¹ League of Nations, Second Opium Conference; Convention, Protocol and Final Act signed at Geneva on 19 February 1925, doc. C.88.M.44.1925.XI. See also: Convention for limiting the Manufacture and regulating the Distribution of Narcotic Drugs, Protocol of Signature and Final Act, doc. C.455.M.193.1931.XI.

² United Nations, General Assembly, *Journal No.* 75, Supplement A 64. Add. I, 15 January 1947.

national d'Hygiène Publique to the WHO or its Interim Commission. The authority previously held by the Council of the League was invested in the Economic and Social Council of the United Nations, which set up a Commission on Narcotic Drugs. This new system of international control will come into force when the majority of Governments parties to the 1925 Convention have ratified the 1946 Protocol. Until then, there is no international authority empowered to recommend to Governments the control of new substances, or conversely the release of old.

Pending the coming into force of the 1946 Protocol, the Interim Commission decided at its second session to appoint an Expert Committee on Narcotic Drugs. Its title was subsequently changed to the "Expert Committee on Habit-forming Drugs", as it was felt that certain substances, although not narcotic, should be considered by the Committee, as their habit-forming tendency made them dangerous. Five experts have been appointed to serve on the Committee, 2 which will hold its first meeting as soon as possible. A request has already been received from the French Ministry of Public Health and Population for the exemption from the 1925 Convention of "Valbine", a proprietary product containing 1 mg. of eucodal per tablet. The synthetic drug known in Germany as "amidon", the therapeutic and addicting effects of which appear to be more marked than those of morphine, presents a further problem. It is expected that international action on this drug may have to be taken.

As soon as the majority of the States parties to the 1925 Convention have become parties to the 1946 Protocol, these problems, together with other technical questions, can be considered by the WHO Expert Committee, and its report made available to the Economic and Social Council of the United Nations.

¹ See details concerning this Commission in WHO Chronicle 1, 3-4, Annex III.

² Dr. J. Bouquet, Pharmacien des Hôpitaux de Tunis;

Dr. H. P. Chu, Professor of Pharmacology, National Medical College, Shanghai;

Dr. N. Eddy, Principal Pharmacologist, U.S. Public Health Service;

Dr. J. R. NICHOLLS, Deputy Government Chemist, London;

Dr. P. O. Wolff, M.D., Ph.D., Buenos Aires.

WHO PUBLICATIONS

The last number of the Bulletin of the Health Organization:

The Treatment of Drug Addicts

The last number of the Bulletin of the Health Organization of the League of Nations (1945/46, 12, 453-686), which has been recently published, is entirely devoted to a paper on the treatment of drug addicts by Dr. P. O. Wolff. This is an important critical survey of the modern literature on the subject, supplementing and bringing up to date the author's earlier study which had been issued in 1932 as League of Nations document C.H. 1075.

The report of the Permanent Central Opium Board for 1943 contained a serious warning that in all probability the post-war period would bring a renewed outbreak of the traffic in narcotic drugs, perhaps on an even larger scale than after the last great conflict. The authoritative contribution of Dr. Wolff will therefore be found of great value, not only because of the large amount of data it contains but also because of its topical interest.

Our knowledge of the true mechanism, as well as of the therapy of drug addiction, still leaves much to be desired. In regard to one point, however, discussion has ceased; it is now generally agreed among physicians that drug addiction is the manifestation of a morbid state and that, consequently, the addict must be, with a few exceptions, regarded and treated as a patient.

But how should an addict be treated? This is one of the most controversial questions in medical therapeutics. The numerous methods proposed very often conflict one with another, and serve to show only that a truly satisfactory method of cure is not yet in sight. The difficulty of making an objective choice between the numerous systems of treatment recommended is increased by an all too common failure in recognizing a true from a false addict. Not every person who takes some habit-forming narcotic drug is necessarily an addict. HIMMELSBACH clearly demonstrated in 1937 that only 19.08 per cent of the patients admitted during nine months to the Narcotic Hospital in Lexington (now officially named the U.S. Public Health Service Hospital) for denarcotization were sufficiently dependent on drugs to render their case suitable for study and had formed what is called "a strong habit". Cases of genuine addiction must, in Dr. Wolff's opinion, be clearly distinguished from the phenomena of acute or chronic drug poisoning and from the effects of therapeutic administration. Morphinism does not simply mean an increase of therapeutic effects or acute symptoms to the extent of amounting to addiction—for instance by cumulative action -for, in the case of addiction, fundamental changes take place in the metabolism as a whole, as extensive pharmacological research has shown. They are thus not merely changes in the metabolism of the nervous system, although the symptoms of the latter are frequently prominent. This applies equally to opium and its preparations and to the habit-forming derivatives of morphine, etc. Much confusion has arisen in the past from an insufficient understanding of these differences, and Dr. Wolff's analysis of the various methods of treatment, based on a strictly scientific definition of addiction, appears to be a long-needed study, which should considerably help to clarify, to the benefit of the general practitioner, some of the more obscure points in the treatment of addiction.

The fundamental aim of the medical treatment of drug addicts is, for the author, the appropriate withdrawal and detoxication of the patient, followed by adequate psychic treatment. In treating morphine addicts, the first essential task of the physician is to insist upon commencing the withdrawal cure as soon as possible, early diagnosis and treatment being of great importance for the prognosis. The decision to undertake the cure should always be taken and carried out as rapidly as possible. This need is discussed in detail and all the psychological and purely medical implications are explained at some length. Are there any exceptions to this rule ? Dr. Wolff answers in the affirmative and explains that in the "benign" type of morphine addiction, which is found only in a very few cases, withdrawal might prove rather detrimental for the patient, inasmuch as it could aggravate his condition and destroy his existing equilibrium without producing any improvement. For the immense majority of cases, however, early withdrawal remains the only hope of the patient, and the author emphasizes the need for the treatment to be applied in special institutions, under the supervision of one doctor, able to gain the full confidence of his patient. Without asking for the creation of a new professional specialista "withdrawal doctor", comparable in some degree to the Anglo-Saxon "anæsthetist"—the author insists that the successful treatment of drug addiction demands a very wide and special experience, precisely because the prognosis per se is so unfavourable and the number of really cured addicts so relatively small. For reasons which cannot be given at length here, Dr. Wolff is in favour not only of compulsory treatment in all cases where treatment is indicated, but also of regulations providing for the detention of every drug addict, even in certain phases of it against his will, who has started a cure. By these means a considerable improvement in prognosis could be expected. Some countries already have regulations along these lines, and a detailed picture of the general situation based on valuable information regarding most of the countries is given by the author.

Most of the space in the article is devoted to details of the actual cure. Before discussing these numerous points, some of the basic principles of withdrawal treatment are enunciated. Of these, perhaps the most important appear to be the necessity for leaving the patient always in doubt as to the actual stage of withdrawal reached, the necessity for a thorough clinical examination before beginning the withdrawal, and the answer to the question: is the cause of the addiction physical or mental? Much consideration is given to the psychological treatment and to the aftertreatment period of rehabilitation, when the fight against the craving is usually carried more on psychological than on purely physical grounds. "There are scores of methods which will free the addict from the drug, but by what method can we free him from himself?" Adams has asked. Dr. Wolff makes an earnest attempt to answer this question, and extracts,

for the benefit of his readers, the most valuable conclusions from the general literature on the subject.

The merits and the disadvantages of the various systems of withdrawal are analysed in a special chapter. The slow, gradual withdrawal is not recommended, as it only prolongs the period of suffering and often encourages a fear complex with regard to the last injection. The results reported by Alpers, Dupouy and other advocates of this method are discussed and criticized at some length.

The rapid withdrawal method, in which the last dose of the drug is given about two weeks after commencement of withdrawal, is regarded as the most satisfactory procedure. The sudden, abrupt withdrawal method, which has warm advocates in various countries (United Kingdom, United States, Canada, Denmark, Netherlands) entails the advantages of sparing both the patient and the nursing staff the experience of the demoralizing influence of the long cure and of suppressing the risk of the withdrawal being prematurely interrupted; but, being a rather brutal method, cannot be applied indiscriminately to all kind of patients.

It is impossible and beyond the scope of this brief summary to mention all the numerous aspects of the treatment of drug addiction discussed by the author and substantiated with ample evidence from the literature. Dr. Wolff has attempted to give not only his own views, but those of other authors as well. 477 papers are listed in the bibliography and the most-significant of these are discussed. Of the problems which have attracted the special attention of the author, the following should be mentioned: treatment during pregnancy, congenital addiction, the reductive dosage ambulatory treatment, the adjuvant and palliative measures during with-drawal, the prospects of cure, the duration of cure, cocaine addiction, mixed forms of addiction, the problem of opium smokers and eaters, and the use of marihuana. More than 70 pages are devoted to the treatment with medicaments and to the various methods proposed, of which the much-discussed Modinos method, consisting in autoserotherapy with blister serum, is of particular interest.

If the existence of the various methods of treatment makes the prospect for the addict, considered as an individual, considerably brighter than they were a century ago, the author is careful not to be too hopeful, at the present stage of our knowledge, as to the possibility of solving the problem of drug addiction as a whole.

Kraepelin regarded little more than 6-8 per cent of the morphine addicts who had passed through his hands as permanently cured. The new treatments have improved the prognosis of drug addiction, but the final results are still far from being satisfactory. Schwarz, from Berlin, reported that of 119 addicts treated during 1917-1925, 42 per cent had remained free from addiction in 1927, but by 1927 20 per cent of the total treated had died (average age at death 33 years). By 1930, 25 per cent had died (average age at death 37 years) and more than a third of them had committed suicide. Haase has calculated that of 73 addicts treated in six years, one-third were free from alkaloids for over one year. Dansauer & Rieth reported that, of 647 war-invalid addicts treated in Germany,

81.6 per cent showed negative results after one year of observation, 93.9 per cent after at least three years and 96.7 after 5 years. Among 4,766 addicts discharged from the U.S. Narcotic Hospital in Lexington, and seen from six months to some years (up to six) after release, the average results were: 25.3 per cent found to be still abstinent... and 74.7 per cent to have relapsed (dead and unknown excluded).

These figures will amply suffice to demonstrate the seriousness of the drug-addiction problem, which has not always received proper attention from the general practitioner and from the national health departments.

In few cases will the truism "better prevent than cure" find a more self-evident application than in the problem of drug addiction. It must always be remembered that no person is immune, that opiates are valuable therapeutical weapons and that addiction is not necessarily a vice or even a physical intoxication, but often a substitute for normal psychological conditions of existence. The problems involved are numerous, the treatment of drug addicts is still at an empirical stage, and there is still much to be accomplished in this field. Dr. Wolff's study, in bringing to the attention of the medical profession a problem of indisputable importance and in presenting a synthesis of our present knowledge, will serve a good purpose.

RATIFICATIONS

Siam, Iraq, and Finland have ratified the Constitution of the WHO, thus bringing the number of States Members of the United Nations which have accepted the Constitution to 17 and that of non-Members which have accepted it to 8. ¹ The WHO Constitution will become legally valid when 26 Member States of the United Nations have unconditionally accepted or ratified it.

WHO REPRESENTATION

During the period between 20 October and 20 November, the Interim Commission was represented by observers who attended or took part in the meetings of the following organizations:

Meeting of the Ad Hoc Committee on Proposed Economic Commission for Latin America, Lake Success, October.

Preparatory Asian Regional Conference held by the International Labour Organization, New Delhi, 27 October.

Second Session of the General Conference of UNESCO, Mexico City, 6 November-3 December.

Second Session of the Trusteeship Council, Lake Success, 20 November.

FORTHCOMING MEETINGS

The Interim Commission will hold its fifth session at the Palais des Nations, Geneva, from 22 January to 7 February 1948.

The Sub-Committee on the Field Services Budget will meet in Geneva on 16 January 1948.

The Committee on Administration and Finance will meet in Geneva on 19 January 1948.

Technical Meetings.

The Expert Committee on Tuberculosis will meet at Geneva, Palais des Nations, some time in February 1948. The precise date will be announced later.

The Expert Committee on Malaria will meet at Washington, D.C., some time in May 1948. The precise place and date of the meeting will be announced later.

¹The Governments of Greece, Yugoslavia and India have also ratified the Constitution, although they have not as yet deposited their instruments of ratification.

^{[2040} A., 2000 F., 1030 Esp., 11/47. Imprimerie de «La Tribune de Genève».

CHRONICLE OF THE WORLD HEALTH ORGANIZATION

VOL. I, No. 12

December 1947

THE HEALTH MISSIONS OF THE WHO

This issue of the Chronicle is designed to present an account of one aspect of the work of the Field Services Division of the World Health Organization—its missions. A general account of the total programme of technical aid to war-devastated countries has previously been given,1 as have notes on the fellowship programme and aid through visiting lecturers.2 When the Agreement between UNRRA and WHO Interim Commission was signed on 9 December, 1946, under which UNRRA granted 11/2 million U.S. dollars to WHO to continue UNRRA's health work on a reduced scale in countries previously aided by UNRRA, these fifteen countries were asked by the Interim Commission in what form they would like assistance. Of the fourteen replies-Albania did not request any help-seven asked that the health missions or liaison officers established in their capitals by UNRRA should be maintained. To ensure continuity and preserve the valuable experience already gained by the staffs of the Health Division of UNRRA in these countries, immediate action was taken to transfer these small staffs-about forty including secretaries—to WHO. Later, their position was regularized either by the signing of formal Agreements or an exchange of letters with the Governments concerned.

These missions naturally differ widely in size, function and composition. Accounts of the work of the three largest—i.e., those in China, Ethiopia and Greece—are included in this issue. In addition, the Interim Commission has two medical officers in Rome, assisting

¹ WHO Chronicle 1, 5-6, 73.

² WHO Chronicle 1, 7-8, 113.

the Italian Health Authorities with technical advice on the large public health schemes financed from the fund derived from the sale of UNRRA goods; and single medical liaison officers in Austria, Hungary and Poland. The duties of these officers include: (a) acting as liaison officer between WHO and the health authorities of the country; (b) assisting in the selection of, and making administrative arrangements for, doctors, nurses, etc., granted fellowships for studying abroad by WHO; (c) advising on, and arranging for, the visits of specialists and lecturers in various fields requested by the Government; (d) advising on and assisting the supply of medical literature, periodicals and teaching apparatus; (e) giving general advice and assistance, on request, to the health authorities, on public health and medical questions, including the prevention of epidemics.

The countries from which imported staff of the missions are drawn are as follows:

From the U.S.A. 16—the great majority being in China; U.K. 5; Canada and Greece 3 each; Denmark, Norway and stateless 2 each; and one from Australia, Czechoslovakia, India, New Zealand, Palestine and Yugoslavia.

The cost of these missions, as budgeted for 1947, is approximately 708,000 U.S. dollars and the Governments themselves have made available an approximate total of 381,000 U.S. dollars in local currency for the local expenses of the missions.

It had been hoped that the permanent World Health Organization would be set up before the end of 1947, but, when it became clear that delay in ratifications would make this impossible, a further application was made to UNRRA in response to which a second donation was offered, again of $1\frac{1}{2}$ million dollars, for the first nine months of 1948. The same procedure is being followed as for the 1947 grant—i.e., the Governments concerned have been asked their wishes on the form in which they would like assistance in 1948: their replies, when received and collated, will be considered by the Sub-Committee on Field Services Budget (UNRRA Funds) on 16 January in Geneva and later by the full Interim Commission, which meets on 22 January.

Thus, thanks to UNRRA's generosity, funds will be available to continue the work of these missions should the Governments concerned so request.

MISSION TO CHINA

Information is now available on the activities of the WHO Health Mission to China during the last three quarters of 1947. During and after the war, the Health Division of UNRRA had dispatched large quantities of medical supplies to China and its personnel had provided medical and technical assistance to the Chinese National Health Authorities. When UNRRA's activities came to an end, the task of providing this assistance was transferred on 1 April 1947 to the WHO Interim Commission by an arrangement signed by the two organizations in December 1946.¹

China, like every country suffering from the results of a long and devastating war and from enemy occupation, was confronted at the end of hostilities with three main problems: lack of funds, lack of qualified personnel, and lack of active scientific contact with the rest of the world. The result was that the authorities could not organize the badly needed campaigns against epidemic diseases—malaria, schistosomiasis, kala-azar, tuberculosis—threatening the population.

The functions of the WHO Health Mission were to train qualified Chinese personnel and to educate them in recent developments in medical knowledge. A number of experts were assigned to the various Chinese health authorities to offer guidance in their particular fields. Thus, the Mission for the year 1947 comprised a group of medical personnel, including two epidemiologists, a pædiatrician, two surgeons, two orthopædic surgeons, a tuberculosis expert, two ophthalmologists, a bacteriologist, a radiologist, a gynæcologist, a neurologist, and an expert on quarantine measures. Sanitary engineers, nursing consultants, and X-ray technicians also formed part of the Health Mission. Their work fell mainly into two categories: the control of epidemics by work in the field, and the training of Chinese staff.

EPIDEMIC CONTROL

Plague. — The focus of plague in the south-east covering large parts of the provinces of Fukien, Chekiang and Kiangsi was almost completely kept under control by the South-Eastern Plague

¹ See WHO Chronicle, 1, 3-4, 48 (1947).

Prevention Bureau with its headquarters in Foochow (Fukien province). A WHO epidemiologist was assigned to this Bureau.

An outbreak during the spring of 1947 in Nanchang, which had hitherto been free of plague, raised serious problems, as it involved a threat to the entire Yangtze valley. A survey of all infected areas was made by the Health Mission, which presented recommendations for an effective campaign including the necessary quarantine measures. A special anti-plague training course for 18 medical officers and senior staff was held in Nanchang from 19 to 30 May. A city ratcontrol programme by various methods gave satisfactory results. As baits were generally more easily available than traps, rat control could best be intensified by extending the use of certain rodenticides. But trapping gave such unsually good results that it was decided to use traps as a routine measure in houses baited the day before. The incidence of plague-infected rats was never great and the occurrence of only one human case of plague was highly encouraging.

A plan for the extension of anti-plague work in Nanchang was drawn up, involving a city-wide application of DDT combined with inoculation in October and November, and a second trapping campaign.

No reports are available on the next most important plague focus, that in the north-eastern provinces, as this region is partly within the area controlled by the Communist armics. It appears, however, from non-official information, that no serious outbreak of plague occurred during last winter and spring.

Kala-azar. — Kala-azar is, in the opinion of many people familiar with China, one of the most urgent of its medical problems. It has been estimated that the case fatality-rate is almost 100 per cent and that the present number of cases is from two to three millions. Recent information from the Shantung, Hopei-Kiangsu area, controlled by Communist authorities, reported about 500,000 cases.

The measures taken against the disease were not, generally speaking, satisfactory, mainly because the kala-azar belt coincides with the civil war fighting-zones. Any serious action to combat the disease in these areas is impossible, as personnel, funds, transport facilities and administrative stability are all lacking. There are several centres of anti-kala-azar activities, but they are confined almost exclusively to larger cities and hospital clinics, and it is

questionable whether the present organization reaches more than 50,000 cases.

The Chinese authorities have made efforts to improve the situation, but they are confronted with a gigantic task. The WHO China Health Mission has actively co-operated with the Chinese health authorities in this work although its present possibilities are limited. A course for training technicians was started and ten students enrolled. Plans were drawn up for a treatment and research centre, and of a total of six buildings planned, two Quonset huts have already been constructed. This is clearly one of the fields in which the local administration needs considerable assistance. The kala-azar problem in China is one of the best examples showing the need for international co-operation in the solution of some of the major health problems.

Tuberculosis. — The anti-tuberculosis programme consisted mainly of surveys by mass miniature radiography and of the distribution and installation of the equipment previously brought to the country by UNRRA. Mass surveys were organized in Peiping, Shanghai, Nanking and Tientsin, with the collaboration of the Chinese authorities. Arrangements have also been made with the Shanghai Board of Education authorities to perform tuberculin tests and radiological examinations of several thousand children in order to find enough tuberculin negatives on whom to carry out a controlled study with the lyophilized BCG vaccine brought from Denmark by the WHO Mission. It was proposed to the National Institute of Health that six other centres for mass chest surveys should be installed by February 1948 and eight further centres after that date. Three Chinese doctors have been sent to Copenhagen for special training in the preparation, application and control of BCG vaccine.

Cholera. — Cholera, fortunately, did not present a great problem this year in China. In Shanghai, for example, the total number of cases reported to 30 September 1947 was 37, less than 1 per cent of the incidence for the same period last year. In the opinion of the WHO expert, the low incidence was due partially to the early inoculation programme, to the more widespread use of piped water supplies, to the reduction in the fly population through the use of DDT, and perhaps most of all to the fact that few cases were imported into the city.

In Nanking, pioneer research was carried out on standardization of cholera vaccine in human subjects, in which the antibody response to the injection of vaccines prepared by different methods was determined.

Other Epidemic Diseases. — Malaria, smallpox, gastro-intestinal infections, schistosomiasis and ankylostomiasis were prevalent, but unfortunately it was not possible for the Chinese authorities to take new and active measures to protect the population. The chief obstacles to their control are the lack of funds and the lack of properly qualified personnel.

TRAINING OF PERSONNEL

Perhaps the most important task of the WHO Health Mission to China was the training of medical and public health personnel, and much of the time of the experts was devoted to this activity. The field covered was very wide: physicians were trained in almost every aspect of clinical and preventive medicine; nurses and sanitary engineers were trained in hospital and public health techniques.

The main training-centres were Nanking and Canton, where two groups of experts were stationed, while individuals were also active in several of the larger medical centres.

In Nanking, the WHO experts were assigned to the Central Hospital and to the National Institute of Health, and have participated actively in the attempt to make the Institute an efficient centre for medical research and training. The training included surgical technique, radiology, bacteriology, ophthalmology, psychiatry and pædiatrics, and consisted of lectures, demonstrations of experimental work and of the new diagnostic and therapeutic methods, as well as guidance in practical public health work. Special lessons in the supervision of rural field practice were given to senior students. A clinical nursing consultant gave advice on nursing procedure.

In Canton, the WHO experts have been assigned to the Canton Central Hospital to co-operate within the framework of the recently established Medical Centre in Canton. Expert assistance was offered in the fields of gynæcology and obstetrics, surgery, ophthalmology, radiology, public health and hospital nursing.

In addition to Nanking and Canton, one ophthalmologist worked in Chengtu and a nursing consultant in Lanchow, Mukden and Formosa, training local personnel and demonstrating modern techniques. Despite great difficulties, it was possible to assign a WHO orthopædic surgeon to the Communist-controlled area, and this mission has yielded very satisfactory results. In many cases the WHO experts worked in the closest collaboration with Chinese doctors and many scientific papers bear witness to the success of this co-operation. China, a country whose normal development has been prevented for at least 15 years, is handicapped by a grave poverty in teaching personnel, and the assistance afforded by the WHO Interim Commission in continuation of the work of UNRRA has proved of great value in the rehabilitation of the country.

OTHER ACTIVITIES

Among other activities of the WHO Mission should be mentioned the expert assistance given to the National Institute for Biological, Chemical and Pharmaceutical Production. This institution was founded by the National Government shortly after the Japanese surrender to take over existing Japanese pharmaceutical factories in China, to continue pharmaceutical production at Government-regulated prices, and to supply the health administration with the most widely needed basic products such as penicillin, sulpha drugs, DDT, glucose and phenol. A WHO pharmaceutical and chemical engineer was assigned to the N.I.B.C.P.P. to provide the necessary technical advice.

The Mission also granted 35 fellowships to Chinese doctors to study newly-developed techniques abroad. In addition, travelling fellowships were reserved for six or eight Fellows who will be sent abroad for three to four months' studies in port quarantine.

MISSION TO ETHIOPIA

The WHO Mission in Ethiopia has been operating since 1 January 1947, as a continuation of the health activities of the UNRRA Mission in that country. In March, the activities and position of the Mission were regularized by the signing of an Agreement between the Interim Commission and the Imperial Ethiopian Government.

It might also be mentioned that Ethiopia was among the first countries to ratify the Constitution of WHO.

The health needs of Ethiopia are almost limitless. With not a single indigenous doctor or nurse for a population of about 12 millions, dependence on foreign aid is essential for some years. There are at present some 70 foreign doctors in the country, of whom 42 are in Addis Ababa, and about the same number of nurses. A committee on medical education recently made what it considered to be a conservative estimate of the needs of the country and put these at about 1,200 medical assistants, 300 nurses and 2,000 dressers, and 1,200 sanitary inspectors: altogether, with other auxiliary workers, about 5,000 technically trained persons are required.

The incidence of disease and the nature of epidemic outbreaks, at least in the provinces, are largely unknown and medical opinion differs widely even on such questions as the relative size and importance of the problems in tuberculosis and venereal diseases. Multiple infections are common.

In the hospitals, elementary equipment is often lacking. Thus a female "dresser", in one of WHO's nursing classes which was shown a film on "Bathing the Patient", commented that "we should like to give care like that to our patients but we do not have a wash-basin, pan or pitcher in our ward", and this was confirmed by inspection. Sanitation is another vast problem, but fortunately food is abundant and the diet well balanced.

Faced with these problems, the WHO Mission, in the closest collaboration with the Vice-Minister of Health and his advisers, decided to concentrate on three main tasks: to give elementary training in nursing and sanitation to dressers and sanitary officers; to assist the Municipality of Addis Ababa in sanitation; and to assist the Ministry of Health in investigating and dealing with epidemics in the outlying provinces. These tasks have tried the small staff—originally two doctors, three nurses and a secretary—to the utmost.

Elementary courses for dressers in four hospitals have been completed and a more advanced course begun at the Menelik Hospital. Eighty-five dressers have now received official certificates as a result of examinations by an independent examining board. Help has been given in establishing courses for dressers at hospitals in outlying provinces and a *Manual* in Ethiopian for the training of dressers has been produced. All reports show the great relief

afforded to the inadequate imported nursing staffs of Government and mission hospitals by even the most elementary training of local dressers.

Two elementary courses for sanitary inspectors have been completed. A selection of the best candidates from both courses will be given more advanced secondary training. Both in the courses for dressers and for sanitary officers, and in schools and at public meetings, much use has been made of cinema films for demonstration purposes.

Two of the three nurses resigned for personal reasons in April and only one has been replaced, but there is an urgent need for another nurse, since the training of the dressers can be kept up to the mark only by constant supervision in the wards. The deputy Chief of Mission, a British medical officer with long experience in the Colonial Service, acted as Medical Officer of Health to the city of Addis Ababa until he resigned in September for health reasons. He was replaced in October by an American sanitary engineer on loan from our Greek Mission and the post of sanitary inspector -vacant since the beginning of the year-was filled at the same time by a Greek who had previously worked with UNRRA and the WHO Mission. The elementary nature of the public health problems would seem to call for this strengthening of the sanitation, rather than the medical staff-and the Ministry of Health has been particularly insistent on this point. In the recent training of sanitary officers, questions of water protection and disposal of excreta have been stressed, in view of the menace of the importation of cholera from Egypt. Plans are being made for some simple sanitation programmes, more in the nature of demonstrations, and a study of various DDT preparations which was made for the Ministry of Health showed that an initial saving of 37,400 Ethiopian dollars could be made on the cost of solvents alone. Other activities included DDT dusting of 15,000 operatives in a cotton-mill and industrial schools.

In addition to the investigation of epidemics of malaria, typhus and meningitis in various parts of the country, other medical activities have included membership of committees on the distribution of medical supplies, on medical education and on measures of protection against cholera. The chief nursing adviser has acted as secretary to the newly re-established Ethiopian Red Cross and gave much time to its activities.

So far, only the surface of the almost virgin soil of Ethiopian health problems has been scratched. The new grant from UNRRA for 1948 should, if the Government wishes it, allow these unobtrusive yet essential activities to continue and perhaps expand.

MALARIA IN GREECE

Malaria has been a scourge in Greece since the days of Hippocrates. Out of a population of six to seven millions, it has been estimated that the disease has been responsible over many years for a total annual number of cases exceeding one million, with an average of 5,000 deaths.

The modern conceptions of the prevention and control of malaria were slow to develop in Greece, and there was little radical improvement in the situation until 1946, when a nation-wide campaign against anopheles, based on anti-imago as well as antilarval measures, with the use of DDT, led to spectacular results.

The campaign was started by the Greek Government with the technical and material assistance of UNRRA. The Athens School of Hygiene, under its Director, Professor Livadas, was responsible for the general administrative and malariological aspects, while the Malaria Control Section of UNRRA, under Colonel D. E. WRIGHT, Chief Sanitary Engineer, dealt with the engineering and technical side of the work. Seven hundred thousand houses were sprayed with DDT by hand, and 96,000 acres of malarious swamps from aeroplanes. The results were spectacular, and brought about an immediate decline in the death rate. Blackwater fever, too, declined, and no cases were reported from areas where the disease had previously Malaria infections in 1946 revealed a remarkably low proportion of P. falciparum infections, showing that transmission in that year was at a low level. As a secondary consequence, it was observed that flies, a plague in Athens since ancient times, completely disappeared during the summer. The DDT campaign against malaria appeared to have even an unsuspected economic consequence, as the yield of olive groves was increased by 25 per cent in some regions, owing to the destruction of the Dacus fly by the insecticide sprayed. When UNRRA ended its activities, some of its functions, including collaboration in the malaria campaign in Greece, were taken over by the Interim Commission of the WHO.

The anti-malaria campaign of 1947 was carried out by the Greek Government under the direction of the Athens School of Hygiene with the co-operation of the Interim Commission Field Mission headed by Dr. J. M. VINE. The campaign mainly consisted of house-spraying and larval control by hand and by air.

The house-spraying was applied to the buildings of every town, village or hamlet in malarious areas with a population not exceeding 6,000 inhabitants. All premises were treated, the walls and the ceilings being systematically sprayed with DDT in the form of a 5-percent emulsion, prepared locally by diluting the 26-per-cent concentrate with water. Two grammes of DDT were used per square metre. A total of 5,266 communities was thus treated with the insecticide up to 1 October. In the towns with a population over 6,000, house-spraying was limited to the buildings on the outskirts of the town. In the large towns of the country—as, for example, Athens—house-spraying was limited for general insect-control to buildings such as slaughter-houses, dairies, restaurants, as well as markets and garbage dumps.

The larval control was carried out both by hand-spraying, repeated every 12 days with a 0.1-per-cent DDT emulsion, one litre per 50 square metres (0.02 gramme of DDT per square metre) and by air-spraying. During 1947 there were 12 air-spraying centres and a fleet of 17 aircraft was employed. The 20-per-cent solution of DDT in Velsicol was used at the rate of half-a-pint per acre—i.e., about 0.012 gramme of DDT per square metre repeated every 15 to 17 days. It was calculated that an aeroplane sprayed 17 acres (ha. 6.8) during a one-minute flight and that the cost of spraying 10,000 square metres was \$0.40 by aeroplane against \$3.60 by hand.

It is believed that, with the exception of villages in the active fighting-zones or in the hands of the guerillas, every community in Greece in the malaria-endemic area has been protected during 1947 either by residual spraying of DDT or by larvicidal methods or by a combination of the two. A plan for the collection of blood samples from selected villages using malaria inspectors specially trained to

¹ In stables, out-houses, warehouses, etc., the DDT was employed in the form of a 5-per-cent Diesel oil solution, prepared by diluting the 20-per-cent concentrate in Velsicol, for air-spraying.

take blood smears has been put into operation. When the results of this collection are known and analysed, it will be possible to make a fairly accurate estimate of the results of the 1947 campaign against malaria in Greece.

TUBERCULOSIS IN GREECE

For nearly two years, Dr. J. B. McDougall was UNRRA Consultant in Tuberculosis in Greece. In an article of 100 pages, "Tuberculosis in Greece", which will appear in the first number of the Bulletin of the World Health Organization, he recounted his personal impressions both of the problems confronting him and his colleagues and of the methods used to overcome them. This account of the difficulties involved in the reconstruction of an adequate working scheme for the diagnosis and treatment of tuberculosis presents, particularly when read in conjunction with the previous article on malaria, a vivid picture of the magnitude of the task confronting the WHO Mission in Greece. But Dr. McDougall's article-aptly subtitled "An Experiment in the Relief and Rehabilitation of a Country"—has more than a local interest. The information gained from the experiences of the UNRRA Tuberculosis Section in Greece will be of great help to any organization, international or other, which decides to assist the tuberculous in countries which are unable, through no fault of their own, to meet their full obligations.

The story begins in the spring of 1945, when UNRRA was asked to survey the tuberculosis requirements of Greece. The country had been devastated by four years of German, Italian and Bulgarian occupation and several months of civil war. It was reliably estimated that 30 per cent of the population was undernourished. Publichealth organization was almost non-existent. The first necessity was a preliminary appraisal of the situation, and Dr. McDougall has grouped his broad general conclusions under fourteen main points. Summarized briefly, the survey revealed that only the crude outline of a tuberculosis scheme existed, that there were practically no full-time specialists, that many sanatoria had been damaged or requisitioned during the war, that those sanatoria which were functioning were short of everything from kitchen utensils and

bed-clothes to X-ray equipment, that the patients frequently refused to be discharged, and that the State expenditure on tuber-culosis work was quite inadequate.

It was decided that the first step should be to open as many beds as possible in institutions only slightly damaged, so as to replace the 1,200 beds lost during the war. The next step was to bring existing dispensaries up to date with equipment, and to introduce as much radiology as possible. In this connexion, Dr. McDougall pays tribute to the enthusiasm of the Greek doctors for mass-radiology, an enthusiasm which, until they were adequately trained in its use, he had to restrain. Lastly, it was considered advisable, in view of the important part in public health played in Greece by voluntary associations, to establish a National Tuberculosis Association of Greece on the lines of American, British and Scandinavian counterparts. The scheme was not over-ambitious; it was an emergency measure for a country in distress, and was intended to lay down sound principles on which the future national scheme could be based.

May 1945 saw the first steps taken to introduce the scheme. Twelve static X-ray sets, 3 mass-radiological sets, 6 artificial pneumothorax machines, 100,000 large, and an equal number of miniature, films, blood sedimentation sets, and surgical instruments were requested, and 5 teams were recruited. By the end of September all these teams were in Greece and working in their allotted areas. That month saw too the formation of a Tuberculosis Department by the Greek Ministry of Hygiene to take over the work when UNRRA should leave. In August 1945, the first mass-radiological centre was opened in Athens with equipment provided by the Greek War Relief Association and, as the result of its work, the first preliminary estimates of the incidence of tuberculosis in Greece were obtained. These led to the deduction that the total number of cases of pulmonary tuberculosis in Greece amounted to 485,750.

At this time there were no more than 4,000 odd beds available for the treatment of all forms of tuberculosis and it was suggested that emergency use should be made of prefabricated buildings for temporary institutional accommodation and for dispensaries. Difficulties and problems rapidly accumulated; administrative disorganization, economic inflation, lack of co-ordination between the various voluntary societies, as well as purely medical problems such as non-pulmonary tuberculosis and tuberculosis in children.

UNRRA had come in a purely advisory capacity, but experience showed that in tuberculosis work efforts would be limited unless some executive power were given.

The primary necessities were funds and equipment, and in this connexion visits to England and the United States proved useful. A study of the whole problem led to the conclusions that the Greek War Relief Association was likely to be the most important single organization operating in all branches of public health, and that the amelioration of tuberculosis in Greece could be based only on a long-term policy, with the Greek Government, the Greek War Relief Association and all other agencies working in the very closest co-operation. Despite reverses, despite the increasing complexity of administrative machinery, the work progressed. Occupational therapy was inaugurated on a small but increasing scale. More sanatoria were opened, more beds made available in others. Mass X-ray centres, anti-tuberculosis propaganda, dispensaries - all figured in the programme of work undertaken, which should be studied in Dr. McDougall's article itself. The final phase came with the acceptance by the Interim Commission of the WHO of the responsibility for the maintenance on a reduced scale of the malaria and tuberculosis programmes of UNRRA after 31 December 1946. The achievements of the 21 months are impressive, and for full details we can only refer those who are interested to the article itself. Briefly, by December 1946, 1,728 additional beds had been made available and a further 2,000 planned for 1947; 26 dispensaries had been opened and a further 18 planned, while over 50,000 "healthy" persons had passed through three mass X-ray centres.

This was the first experiment of its kind in tuberculosis to be conducted by a group of international specialists in a foreign country. Dr. McDougall and the Tuberculosis Section, composed of one Central Consultant, five Area Consultants, five tuberculosis nurses, two technicians and five clerk-interpreters, had the satisfaction of knowing that their work on behalf of the tuberculous in Greece would continue and that the plans made would be followed up by some, at least, of the tuberculosis consultants who had already done so much valuable field-work.

WHO PUBLICATIONS

EPIDEMIOLOGICAL AND VITAL STATISTICS REPORT: POST-WAR DEATH RATES

An article on post-war mortality rates by Knud Stowman, Epidemiological Consultant to the WHO, published in the latest number of the *Epidemiological and Vital Statistics Report* will undoubtedly surprise those readers who are not specialists in this particular field; for the figures presented by the author show that, despite two wars and a deadly influenza epidemic, mortality is decreasing, against all expectation, in practically every country. Here are some of the facts quoted by the author.

The first fact revealed by a glance at the mortality figures is that the low-death-rate area of the world remains essentially the same as before the war. It consists of the Scandinavian countries with Finland, the Netherlands, United Kingdom, Switzerland, Canada, the United States, Argentina, the Union of South Africa (white population), Australia and New Zealand, which all had death rates from 8.5 to 12 per 1,000 inhabitants in 1946 as they had before the war. To this list must now be added Italy, where the death rate for the first time was down to 12 per 1,000 in 1946. Judging from the fragmentary information available, Germany, on the other hand, can no longer be counted among the low-mortality countries.

The Netherlands held the world record for low mortality with a 1928-1938 median of only 8.8 per 1,000. In 1946, the death rate, after a temporary increase during the war years, dropped again to 8.5, a minimum which had been touched only once before: in 1938.

Sweden, Norway and Denmark had death rates from 9.2 to 10.9 per 1,000 in 1946, all lower than the pre-war medians. Finland which, contrary to Denmark, had a heavy war-mortality reaching nearly 20 per 1,000 in 1940 and 1941, reached the figure of 11.6, the lowest ever experienced in that country. France, too, registered in 1946 the lowest death rate it ever experienced, namely 13.4 per 1,000. Belgium had a general death rate of 13.2, Switzerland of 11.2 in 1946, both comparing favourably with pre-war years. In Italy, the death rate fell from 17.4 per 1,000 in 1921-1925 to 13.4 in 1939, after which it dropped to 12.0 per 1,000 in 1946. There has been a somewhat similar decrease of mortality in Spain and Portugal, but the rates remain higher than in Italy (14.7 for Portugal and 12.1 per 1,000 in Spain). The latter figure, however, would appear to be slightly under-estimated.

It is unfortunate that mortality data are scanty for Central and Eastern Europe, as this area includes some of the countries which suffered most severely from the war. It may, however, be stated that Austria is nearly back to its pre-war mortality with a death rate of 13.4 per 1,000 in 1946, as

¹ 1, 5, October 1947.

against 24.8 per 1,000 during the previous year. In Hungary, the 1946 death rate was 14.1, which is about the same as the average for 1936-1943. In Czechoslovakia (excluding the German population, which was being evacuated), the death rate was 13.7 per 1,000 in 1946 as against a pre-war median of 13.5. In Rumania, where the death rate has always been high, it was 18.0 per 1,000, as against a pre-war median of 20.2. In Bulgaria, the mortality rate for 1946 was 13.7 per 1,000 as against a median of 15.6 per 1,000 for the years 1928-1938. In the United States and the British Dominions, the war had no significant effect upon the civilian mortality. The 1946 death rates were 10.1 for the United States, 10.0 in Australia, 9.7 in New Zealand, 8.8 in the Union of South Africa (white population), and 9.2 in Canada. In temperate South America, Argentina had a death rate of 10.6 in 1944. Considerably higher death rates are encountered in the tropical and semi-tropical countries of Latin America, although there has been a definitely downward trend. Thus, in Mexico, the rate fell from 23.4 in 1936-1940 to 19.4 in 1946, in Venezuela the death rate decreased from 17.8 in 1936-1940 to 15.0 in 1946, and in Chile from 23.2 in 1936-1940 to 17.2 in 1946.

The registration area of India gave a death rate of 17.5 per 1,000 in 1946 as against 22.2 in 1936-1940 and 24.1 in 1944. Only Japan is a notable exception, for the death rate, which was 20.6 per 1,000 in 1921-1930 and 16.4 from 1939-1944, rose to 21.4 in 1946.

There can be little doubt that the standard of living as apparent in food, housing, fuel and clothing supply is lower now in Europe than it was before the war. The favourable mortality situation existing in most places where information is available is therefore somewhat of a surprise. The absence of serious epidemics and the relatively high state of public-health work and of social services count, of course, for something, but there seem to be still other factors at work. It is more than likely that the greater degree of individual healthiness attained between the two world wars has produced an increased resistance. How long that stamina can last if severe hardships should be prolonged remains to be seen.

The article is accompanied by statistical tables giving the general death rates in some countries, the general death rates in large towns of Europe, the general death rates in some large towns outside Europe and tuberculosis mortality.

OFFICIAL RECORDS OF THE WHO

The Official Records of the World Health Organization contain the summary records of the meetings of the principal organs constituting the World Health Organization, together with the documents considered at these meetings.

With the exception of No. 2, Nos. 1 to 5 have either already appeared or will have appeared before the end of 1947. No. 2 is to be devoted to the discussions and Final Acts of the International Health Conference, held in New York in June 1946, and its publication has been postponed pending the issue by the United Nations of the Report of the Conference.

No. 1, which has been recently issued, contains the Minutes and relevant documents of the meetings of the Technical Preparatory Committee for the International Health Conference. This Committee, set up by the Economic and Social Council of the United Nations, met in Paris from 28 March to 5 April 1946.

No. 3 contains the Minutes and documents of the first session of the Interim Commission, held immediately after the International Health Conference in New York in July 1946; No. 4, those of the second session held in Geneva in November 1946; and No. 5, the records of the third session held in Geneva in April 1947. No. 6, containing the records of the fourth session which took place in Geneva in August 1947, will be submitted in proof form for approval to the fifth session of the Interim Commission.

Subsequent numbers will contain the records of the final sessions of the Interim Commission, and, later, of meetings of the World Health Assembly and of the Executive Board.

NOTES AND NEWS

VENEREAL DISEASES

Four members have been appointed to serve on the Expert Committee on Venereal Diseases which is now being formed. They are Dr. W. Coutts, Chief, Department of Social Hygiene, Dirección General de Sanidad, Santiago de Chile; Professor M. Grzybowski, Clinic of Dermatology, University of Warsaw, Poland; Dr. J. F. Mahoney, Director, Venereal Disease Research Laboratory, United States Public Health Service; and Dr. G. L. M. McElligott, Medical Officer in charge of Venereal Disease Division, Ministry of Health, London.

WHO REPRESENTATION

During the period between 10 November and 20 December, the Interim Commission was represented by observers who attended or took part in the meetings of the following organizations:

Second Session of the Inter-American Conference on Social Security, Rio de Janeiro, 10 November.

Fourth General Congress of the International Relief Union, Geneva, 25-27 November.

103rd Session of the Governing Body of the International Labour Organization, Geneva, 11-15 December.

Executive Board of the International Children's Emergency Fund, Lake Success, 2 December.

Preliminary Meeting of Experts on Housing in Tropical and Sub-Tropical Areas, Caracas, 2 December.

FORTHCOMING MEETINGS

The Interim Commission will hold its fifth session at the Palais des Nations, Geneva, from 22 January to 7 February 1948.

Now that 21 States Members of the United Nations have ratified the WHO Constitution, it is anticipated that the First World Health Assembly will be held some time in the spring or early summer of 1948. The interim phase of the WHO is drawing to a close. The next step is the establishment of the Organization proper, and the forthcoming meeting of the Interim Commission should form a landmark in the evolution of a single international health organization. Members will have to consider the activities of the Interim Commission and to formulate specific recommendations to the Assembly. Suggestions will be made on the methods of combating on an international scale those diseases—tuberculosis, malaria, venereal diseases, influenza-which constitute an ever-present threat to international public health. Other public-health problems such as quarantine measures, publichealth administration and education, habit-forming drugs, insulin supply, infant mortality, will be discussed. Finally, organizational problems, the relations of the WHO with other organizations, the site of the headquarters, the budget for 1948 and 1949, will also be considered.

The Sub-Committee on the Field Services Budget will meet in Geneva on 16 January 1948.

The Committee on Administration and Finance will meet in Geneva on 19 January 1948.

Technical Meetings.

The Expert Committee on Venereal Diseases will meet at Geneva, Palais des Nations, on 12 January 1948.

The Expert Committee on Tuberculosis will meet at Geneva, Palais des Nations, some time in February 1948. The precise date will be announced later.

The Expert Committee on Malaria will meet at Washington, D.C., some time in May 1948. The precise place and date of the meeting will be announced later.

INDEX OF SUBJECTS

P	ages	Pages
Alexandria, Sanitary Bureau in	129 136 117 167 111	Economic and Social Council appointment of the Technical Preparatory Committee
BCG	151 109 17	Epidemiological and Vital Statistics Report
Biological standardization. Expert Committee on. 60, 77, 95, Membership. First meeting. Participants.	$95 \\ 103 \\ 104$	Fellowships
Birth-rates, recent trends Blood antigens ABO System Rh System	120 110 110	Food and Agriculture Organization relations with WHO
Bulletin of the World Health Organization	83	WHO Sub-Committee on Negotiations with
Cancer statistics	82	Governments aid to 15, 173, 175, 179, 182 emergency assistance to 15
cination	146 175	Greece WHO Mission to 74, 182, 184
control in China	189 157 141 14 132	Habit-forming drugs . Expert Committee on
DDT 148, 179, 181,	182	Hospital services 19 Housing 152
Death. causes of, see International List of Diseases and. rates	187	Immigrants, medical examination of 131 Influenza Centre, proposed
Delinquents, treatment of Diagnostic procedures, standardization	132 16	control of
Digitalis, standardization	111 153	appointment of the
Diseases and Causes of Death communicable, see communicable diseases. tropical, see Tropical diseases.		Committee on Administration and Finance
venereal, see Venereal diseases. Disinsectization 148, 177, 181, Drug addicts, treatment of	182 168	Committee on Headquarters 56, 70, 72, 93 Committee on Priorities . 71, 93, 135

rages	Pages
Interim Commission (contd.)	International Sanitary Conventions
Committee on Relations 55, 72, 93	(contd.)
Sub-Committees on Negotiations	Expert Committee for the revision
and Relations 94	of the 96
Committee on Technical Questions 135	for aerial navigation of 1933 and
Executive Secretary, election of 44	1944 112
Expert Committees	of 1903, 1912, 1926, 1933, 1938, 1944 14
Internal Committees 54, 93	of 1926 and 1944 145, 147
Sessions of the First	Pilgrimage Clauses of the
Participants	Expert Sub-Committee for the Revision of the 88
Second	Membership 96
Participants	First Meeting
Third 69 (No. 5-6)	Participants at the 90
Participants 97	International Statistical Institute 18
Fourth 121	International Union against Cancer 54
Participants	
States represented in the 10	Vols agen control in China 166
tasks of the	Kala-azar, control in China 176
Technical Committees 54	
International Children's Emergency	League of Nations Health Organi-
Fund	zation
	Bulletin of the
International Civil Aviation Organi- zation, see also Provisional ICAO 69	Experts of the
(No. 3-4)	Malaria Committee of the 102
proposal by, concerning health for-	Permanent Commission for Stand-
malities 112	ardization of the 103
relations with WHO 21	Representation of the International
International Digest of Health Legis-	Health Conference 8
lation	Technical Commission of Pharma-
International Federation of Phar-	copœias
macy 78	League of Red Cross Societies
International Health Conference	representation at the International
agenda for the 6	Health Conference
Chairman of the 8	Lecturers, visiting
convening of the 3	in Austria 113
Final Act of the	
China 3	Malaria
States invited to the 6, 7	Campaign against, in Greece 74
States represented at the 6, 7	Expert Committee on 95
Technical Preparatory Committee	Membership 95, 136 First Meeting 101
for the	Participants
participants at the 4	Mecca Pilgrimage, sanitary control of 88
report of the 6	Medical care
work of the	Medical examination 112
Vice-Chairmen of the 8 work of the 6	of immigrants
work of the	Medical literature, supply of 76
relations with WHO 21, 51	Medical personnel, training of 61
represented at the International	in China
Health Conference 7	in Ethiopia
International List of Diseases and	Medical statistics 85, 162
Causes of Death 18, 62, 85, 162	Medical teaching, improved stan-
Sixth Decennial Revision of the 86, 164	dards of
Expert Committee for the pre-	Mental health
paration of the 85, 95	Microbiology, Fourth International
Membership 95	Congress of 82, 124
First Meeting	-
Second Meeting	Narcotic Drugs, see Habit-forming
Participants	Drugs.
International Sanitary Conventions	Non-Governmental Organizations
122, 141, 160	Collaboration of the WHO with 53, 70
adoption of, by the WHO 20	Sub-Committee on 70

	Pages	Pages
Office International d'Hygiène Pub-		Sanitary Conventions, see Interna-
lique	1, 4	tional Sanitary Conventions.
lique	118	Schistosomiasis
dissolution of the	8	Scientific research, international co-
Protocol concerning the	11	ordination of
representation at the International		Secretariat of the WHO, see WHO
Health Conference	8	Secretariat.
transfer of functions to WHO	47	Specialized Agencies 69 (No. 3-4)
Official Records of the WHO 84	, 188	draft agreements with the 50
		draft agreements with the 50 relations of WHO with the 69 (No. 5-6)
Pan American Sanitary Bureau	1, 5	Standardization
integration with the WHO	9	of biological and pharmaceutical
negotiations for the	49	products, see Biological standar-
Representation at the International		dization.
Health Conference	8	of diagnostic procedures 16
Passports, Conference of Experts on	111	Statistical services of the WHO 20
Penicillin, standardization	105	Statistics of mortality and morbidity. 18
Pharmaceutical products		See also International Lists of, etc.
standardization of	16	cancer82
in ChinaPharmacopœias, Unification of	179	Streptomycin in tuberculosis
Pharmacopæias, Unincation of	77	in tuberculosis
Convention of 1906 concerning.	78	Sulpharsenamide, standardization 111
Expert Committee on	96	Sulpharsenamide, standardization 111
Membership	$\begin{array}{c} 96 \\ 149 \end{array}$	m '1 ' 1 1' '
First Meeting Participants	150	Toxoids, standardization 107
International Agreement on	78	Tropical diseases, plan for an Institute 60
Pilgrimage, see International Sanitary	• • • • • • • • • • • • • • • • • • • •	Trust territories, assistance to 16
Conventions.		Tuberculin, standardization 107 Tuberculosis
Plague		control in China 177
control in China	175	control in Greece
international action against	126	Expert Committee on 79, 95, 151
PPD, see tuberculin.		Membership95
Progesterone, standardization	111	First Meeting. 151
Provisional International Civil Avia-		Participants
tion Organization		
co-operation with the WHO	52	UNESCO
representation at the International		relations with the WHO 21, 52, 69, 70
Health Conference	8	Sub-Committee on Negotiations
Psittacosis, quarantine measures	* ~ ~	with 70 (No. 5-6)
against	128	with
Public health administrative tech-	10	Health Conference 8
niquePublic health services, study of the	19	Union Internationale contre le Péril
organization of	61	Vénérien54
organization of	83	Unitarian Service Committee 76, 113
dolications of the WHO	00	United Nations
0 41		building and working conditions,
Quarantine	• •	building and working conditions, WHO technical advice on 132
Expert Committee on	96	draft agreement with WHO 45, 133
Membership	96	sub-committee on negotiations
First Meeting	146	with
Participants	146	Economic Commission for Europe 152
measures against psittacosis	128	Housing Group of the 152
		Emergency Economic Committee
Rabies treatment, tenth report on		for Europe
data of anti-	117	United Nations Charter, concept of
Rh, see Blood antigens.		"health" in 3
Rockefeller Foundation		UNRRA
representation at the International	_	assistance to national health admi-
Health Conference	8	nistrations 73
Rodenticides	126	Health Division of
		representation at the International
Salmonella, International Centre of	130	Health Conference
San Francisco Conference	3	transfer of health functions to
Sanitary Bureau in Alexandria	136	WHO 48, 73

Pages	Pages
Vaccination, International Certificates 112, 147 Valbine 167 Venereal diseases Expert Committee on 127 programme of international action against 61 Vitamin E 104 Vitamins, standardization 110	WHO (contd.) Objectives
Weekly Epidemiological Record	Secretariat 25, 34 Title of the 13 Voting 26, 38 WHO Constitution 11 amendments to the 39 draft of the 4, 9 entry into force of the 40 interpretation of the 39 ratification of the 116, 172 signatories of the 41 text of the 29
Director-General	Yellow fever inoculation against

INDEX OF NAMES

Pages	Pages	Pages
Abaza, M. S	Beveridge, W. I. B 124 Biraud, Y. M. 4, 6, 51, 65, 68, 100, 146, 153 Bittner, J. J	Canaperia, G. A. 43, 120 Čančik, J 4, 41 Carvalho-Dias, A 119 Castillo, D 97, 128, 137 Cattel, McK 113 Cavaillon, A. 4, 5, 8, 66, 83, 97, 126, 128, 129, 131, 134, 137 Chapdelaine, J 67 Chisholm, G. B. 4, 5, 41, 44, 53, 65, 68, 100, 113,
Backer, J. E 95, 162 Baggesgaard- Rasmussen, H. 96, 150 Banning, C 42, 99, 138 Barberousse, C. M 42 Barker, Z. N 42 Bathurst, M. E 138 Benavides, J 41 Berg, C. van den 42, 65, 68, 80, 93, 94, 99, 119, 124, 131, 138 Bermann, G 4 Bernard, L 66, 138 Bertillon, J 85	Bow, M. R. 137 Boyer, J. 119 Brain, R. 67 Brancion, G. de. 91, 96 Bretey, J. 7, 10, 41, 55, 56, 57, 93, 94 Broom, J. C. 119 Bustamente, M. 63 Bustos, J. 41 Cakrtova, M. 95, 162 Calderone, F. 133, 139 Calderwood, H. B. 67, 138 Cambournae, F. C. 43 Cameron, G. D. W. 97, 137	Chodko, W

Pages	Pages	Pages
Danielopolu, D 120 Dansauer, F 170	Hilleboe, H. E. 79, 95, 151 Himmelsbach, C. K 168	Miles, A. A 95, 104 Moll, A. A 5, 41, 68 Mondragón, O. S. 42, 44,
Da Sá Lessa, G 99 Davidson, A. E 99, 139	Holm, J 79, 95, 151 Hyde, H. van Zile. 64, 67,	Mondragón, O. S. 42, 44, 63, 121
Denoix, F 162	98, 133, 138	Mooser, H 113
Dogramaji, I 42 Doull, J. A 4, 64, 67	Ipsen, J 118	Mora, J. A 42 Morán, G 41
Dujarric de la Rivière	-	Morgan, M. T. 4, 68, 90, 91, 95, 139
95, 146 Dumas, J. B 78	Jakova, T	91, 93, 139 Moriyama, I. M 162
Dunn, H. L 162	98	Morrell, C. A 118
Dunnahoo, G. L. 95, 146 Dupouy, R 170	Jones, C. M	$\begin{array}{llllllllllllllllllllllllllllllllllll$
	Juzbašić, C 66	Muñoz, J. A 41
Eddy, N 96, 167 Edmonds, C. H. K.	Kacprzac, M. 4, 95, 162	Nájera, L 118
67, 98, 138	Kaiser, M 43	Nasr, Taha Elsayed Bey 41
Eliot, M. M 42 Elkin, A. B 68	Kalichenko, I. I 42 Kauffmann, F 130	Nasri, Y 42, 91, 96 Nazif Bey, H. E.
Eugster, J 43	Kaul, P. M 161 Kauntze, W. H 67, 98	142, 144, 146
Evans, J. P 113 Evstafiev, N 41	Khalil Bey 91	Needham, J 99 Nègre, L 119
Fobre I 111	King, P. Z121, 128, 137 Kohn, E	Nevares Vásquez, R 41 Nichols, J. R 96, 167
Fabre, J	Kolesnikov, S 98	Nogueira, P 41
Fairley, N. H 95, 102 Fales, W. T 95, 162	Kopanaris, P 4, 41 Koussitassef, K. 119, 120	O'Brien, W 162
Feery, L. M 67	Kraepelin, E 170	Olin, G 124
Feraud, L	Krotkov, F. G. 8, 42, 44, 63, 66	Omar, W 4, 90, 96 Orahovatz, D. P 43
Fiallos, J. M 41 Friedewald, W. F 124	Labeyrie, C 97, 138	Orr, Sir J. Boyd 51
Gabaldón, A. 59, 66, 94, 95, 102	Laet, M. de	Ørskov, J. 41, 95, 104, 109, 124
Gallois, H 139	Lakshmanan, C. K. 41, 63	Pampana, E. J. 95, 100, 102
Gaud, P.L.M. 5, 68, 90, 91, 96, 99, 139	Lal Katial, C 4 Lara, H 42	Parelman, S. T 98, 138 Parisot, J 4, 41, 64
Gautier, R. 68, 95, 100,	Latsky, J. M 99, 139	Parran, T. 4, 5, 8, 42, 43,
103, 104, 124, 139 Gear, H. S 42	Leclainche, X. 4, 5, 64, 66, 137	48, 64, 67, 121, 122, 126, 138
Gerin-Lajoie, L 137	Leon, R 41 Leon, W. de 42	Paula Souza, G. H. de
Ghani, G 41 Gibbard, J 118	Loghem, J. J. van 90, 96	4, 8, 41, 48, 64, 67, 98, 121, 134, 137
Ginés, A. R 42 Goodman, N. M. 5, 53, 68,	Lontzki, M 119 Lorenzen, A. E 91	Paz Soldán, C. E. 42, 64, 98, 138
73, 100	Lotte, A 119	Peltier, M 119, 120
Goudsmit, C. J. 68, 99, 138 Grasset, E 95, 104	Lucas, A. J 68	Pepin, E
Green, K. V 138	MacCormack, J. D 43 Mackenzie, M. 4, 57, 64,	Phelan, E 52
Greenberg, L 118 Greenwood, M 117	66, 80, 93, 94, 98, 122,	Pierret, R 4 Pons, A 139
Gregoric, P 137 Gros, L 139	Madsen, Th 108	Pridie, E. D 91
Grzegorgzewski, E 42	Makhlouf, A 42	Rae, A. M. W 138
Guthe, T 127	Mani, C. 41, 63, 67, 93, 96, 98, 138	Razis, J 4 Redshaw, G. M. 67, 98, 138
Haase, E 170 Hafezi, H 41	Marshall, J. T 95, 162 Martin, E 113	Reed, L. G
Hakim, G 42	Martinez Baez, M. 4, 5, 67,	Rieth, A 170
Halstead, J. G. H 137 Hampshire, C. H. 96, 150	93, 98 McDougall, J. B. 79, 95,	Ritchie, T. R 42 Rivero, R 42
Hart, P.M., d'Arcy, 79, 95, 151	151	Robb-Smith, A. H. T 164 Roosevelt, E 25
Hayes, L. W 98	McKendrick, A. C 117 Medhat, Cheikh-al-Ardh 42	Roper, A 52
Hazard, R 96, 150 Hazra, A. K 118	Medved, L. I 26, 42, 64 Melanson, J. A 97	Rostock, O
Hemmes, G. D 96, 146	Messinezy, D. A 75	137

Pages	Pages	P_{ages}
Ruesta Marca, S 66	Stuart, G. 80, 91, 95, 131,	Vaucel, M. A 136, 137
Russell, P. F 95, 102	145	Veldee, M. V. 95, 104, 107
	Su, T. L 97	Vesely, J 75
Sand D	Swellengrebel, N. H 119	Vieuchange, J 125
Sand, R 4, 5	Sze, S. 4, 41, 44, 48, 63,	Vine, J. M 75, 183
Sandberg, H. T 42, 63 Santamarina, V 41	66, 97, 121, 125, 133, 137	Vinogradov, N. 121, 125,
Santamarina, V 41 Sauter, A 43		139
Sautter, H. Y 66, 97	Tamthai, B 43	Vishwanathan, A. K 136
Schwartz, H 170	Tange, A. H 41, 64	Visscher, M. B 113
Sevilla-Sacasa, A 42	Tasemma, $G_1 \ldots G_1$	Vollenweider, P. 80, 119
Sharp, W 133	Thomen, L. F 41	Wellman A 110
Shen, J. K 8, 41, 63	Timmerman, W. A. 42, 65,	Wallgren, A 119
Shousha Pasha, A. T.	68, 94, 95, 99, 104, 133,	Watt, A
4, 41, 44, 57, 63, 66, 94,	m l I I I I I I I I I I I I I I I I I I	West, J. B 42, 65
97, 128, 131, 137	Togba, J. N. 42, 60, 65, 67	Willcox, R. R 106
Sokhey, Sir Sahib Sing	Topping, A 5, 100	Williams, L. B 64
95, 104, 118	Toranzo, A 42	Wolff, P. O 96, 167
Soper, F. L 99, 117	Trefi, C	Wortis, S. B 113
Sotelo, L. V 41	Trefouël, J 95, 104	Wright, D 74, 182
Stampar, A. 4, 5, 42, 44,	Turner, B	Wyllie, G 95, 162
63, 66, 97, 121, 133, 137	Tutunji, D. P 43	• ,
Stefanopoulo, G. J 125	I u cunji, D. 1 45	Yassine, Y 91
Steinig, L 139	77 7 . A. Ima O	Yates, G. E 42, 64, 68
Stock, P. G 80, 120, 146	Uribe Aguirre, C 41	Yung, W. W. 96, 146, 161
Stocks, P., 67, 87, 95, 162	*****	
Stockum, M. van 118	Vallarino, J. J 42	Zhukova, I. M 99, 139
Stowman, K. 120, 153, 155	Vallat, F. A 67	Zwanck, A 41