

INTERNATIONAL HEALTH INVESTIGATIONS

THE report to the Council of the League of Nations on the work of the thirty-first session of the Health Committee, November 20-24, 1939 (Special Supplement to Monthly Summary of the League of Nations, January, 1940), emphasizes the important duties of the Health Organisation under war-time conditions, particularly in view of the threats to health from movement of populations and evacuation.

The Committee agreed that the permanent health services should not be interrupted, particularly the Epidemiological Intelligence Service, the Singapore Bureau and the biological standardization work, the utility of which is universally acknowledged. It is also desirable to continue studies on which a considerable amount of work has already been carried out, such as the inquiry into the radiological treatment of cancer of the cervix uteri, the preparation for the unification of the various national pharmacopœias, the studies undertaken by the Malaria Commission on malaria immunity, and the biology of certain strains of *Plasmodium*, the co-ordination of investigations into nutrition in the East, and the analysis of the annual statistics of rabies. The Committee also considers that national committees and national institutes should be urged to continue their work on nutrition, physical fitness and housing, for which the Health Section will ensure the necessary liaison and co-ordination. It was considered that comparatively new studies, such as museums of hygiene, clothing and the preparation of an international list of diseases, must be relegated to the background for the present, and it was agreed that the impending Pan-African Health Conference should be deferred until the end of the War. The Anti-malarial Drug Conference and the Rabies Conference have been similarly deferred.

In view of the repercussions the present War is likely to have on public health, the Health Committee considers that attention should be devoted to such questions as the importation of diseases into regions hitherto free, the possible contamination of drinking

water, and lower standards of living and hygiene. The Emergency Sub-Committee and the Health Section have accordingly been authorized to take such action as circumstances require, including a stocktaking of the armoury of preventive and curative weapons made possible by modern epidemiology, chemotherapy and serotherapy. The Health Section proposes to define the principles which should be followed in the control of those epidemic diseases which are regarded as the most important in present circumstances, for example, immunization against diphtheria and scarlet fever. Other questions to which the Health Organization is prepared to give attention are the medico-social problems arising out of the evacuation of threatened populations from war zones, including questions of environmental hygiene among evacuated persons living in the reception areas and individual standards of hygiene, as well as problems of food supply requiring the application of the rules of modern dietetics in the use of foodstuffs and in collective and individual dietaries. In view of the considerably increased volume of work anticipated, the Committee directed the Secretary-General's attention to the desirability of making at least some temporary increase in the staff.

The introduction of international biological standards by the Copenhagen and Hampstead Institutes has continued normally, and the number of institutes using these standards has increased. The Health Committee once more directed attention to the recommendation adopted by the Permanent Commission on Biological Standardisation in 1928 regarding nomenclature to be used in the designation of blood groups.

The report of the Housing Committee, which met at Geneva during June 26-July 1, 1939, to discuss the hygiene of the planning of space, the abatement of smoke, dust and toxic gases, water supply, sewage treatment, and the collection and treatment of domestic refuse, is being communicated to Governments, health administrations and the institutions concerned.

RECENT AMERICAN WORK ON PLANT VIRUSES

THE meeting of the American Association for the Advancement of Science, which was held at Columbus, Ohio, in December, was the occasion for the presentation of several interesting papers which make fundamental contributions to our knowledge of plant virus diseases. The first categorical indication of structure of the virus particle can be obtained from a comparison of the work of John W. Gowen, of Iowa State College, with earlier findings. His work on X-ray inactivation and size of various organisms, including insects, bacteria and viruses, shows that functional correlation of these two factors "must be between the size of some vital substances within the cell rather than the cell as a whole". The 'repro-

ductive' part of a virus particle has a molecular weight of 15,000,000, which compares with about 7,000,000 suggested by other workers for the whole virus particle. The portion of a virus susceptible to inactivation by X-rays is apparently denser than the rest of the particle.

Vernon L. Frampton, of Cornell University, showed that the protein of tobacco mosaic virus is thixotropic; it forms a colloidal sol, but can change to the fluid state if it is agitated. The report consisted of motion pictures which recorded the birefringence of the sol as observed through polaroid plates. Thixotropic gels show neither Brownian movement; diffusion nor osmotic phenomena, and it is pointed