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**THE WORK OF WHO  
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**WORLD HEALTH ORGANIZATION**

**PALAIS DES NATIONS**

**GENEVA**

**March 1953**

ragua in July 1952 ; the second, in southern Brazil, began during November 1951 in Mato Grosso and by May 1952 had spread to four other States of Brazil. Human cases continued to be notified both in Nicaragua and Costa Rica, and in São Paulo, the Brazilian State most affected, some 80 deaths were reported. The outbreak in Africa—an extensive epidemic in the Onitsha Province of Eastern Nigeria—occurred in the early part of the year. In all three outbreaks, prophylactic vaccination of the populations exposed to risk was widely practised.

It was pointed out in the Annual Report for 1950 that, although the means of controlling smallpox had long been known and dried vaccines were available to all countries, the disease still remained almost a world-wide problem. A need exists for a dried vaccine that does not lose potency in hot countries ; several dried vaccines are available, but none has obtained the confidence of all national governments. In 1952 WHO enlisted the co-operation of several laboratories, and, through the good-will of many manufacturers of vaccines, started investigation into the comparative rate of loss of potency of four dried vaccines when stored at temperatures likely to be met with under field conditions. These investigations will have to continue for at least a year before the results can have any value.

### Chronic Diseases

With the more widespread control, in the developed countries, of many of the communicable diseases which formerly killed a great proportion of the population at comparatively early ages, other diseases—among them chronic diseases and the so-called diseases of old age—have almost suddenly seemed to become more common. In a study covering many countries throughout the world during the first half of the present century, WHO has examined the evolution of mortality from cancer and analysed the observed trends by the location of the tumour, by age and by sex. From this study it appears that, although the increase or decrease of mortality varies considerably with the site of the cancer, mortality from cancer in general, as shown by crude death rates, is clearly on the increase in many countries. It is pointed out, however, that there are a number of facts which may have contributed to this rise, such as the complexity and heterogeneity of the available data, the disappearance of some classified mortality lists during the war, the recent improvements in diagnostic skill, the wider availability of diagnostic techniques, and the change in the age distribution of populations.

### Decrease of Mortality

Mortality from a number of diseases has noticeably declined. In 1952 WHO continued its series of statistical studies of the evolution of mortality from infectious diseases in Europe from 1900 to 1950. These studies take into account the typhoid groups of fevers, scarlet fever, pertussis, diphtheria, measles, malaria, smallpox and typhus. They show that in many European countries mortality from the typhoid fevers has almost disappeared ; deaths from scarlet fever are now few, in contrast with the situation at the beginning of the century, and reductions in mortality from diphtheria have, in the long run, been remarkable. Although pertussis and measles have declined, generally, as causes of death, they still have considerable importance as causes of morbidity in children. The information collected on mortality from malaria, smallpox and typhus clearly reveals a notable reduction, although there have been at times fairly serious epidemic outbreaks of these diseases.

### Increase of Population

The control of diseases, the great advance in public health during the nineteenth and twentieth centuries and the consequent drastic reduction of mortality have contributed greatly to the vast increase of world population. This “demographic revolution” was the subject of a detailed “Study of the Influence of the Decline in Mortality on Growth of Populations”, published by WHO in 1952. During the last three centuries the population of the world is estimated to have almost quadrupled, two-thirds of this increase having occurred in the last century and one-tenth since the beginning of the Second World War. The continuing growth of populations, particularly in some of the under-developed countries, has become a public-health problem of great consequence to the nations concerned and to the whole world. It was discussed at length at the Fifth World Health Assembly, but because of extreme divergencies of opinion on the health aspects of the problem the Assembly ultimately agreed that no action should be taken.

directors of laboratories in Ann Arbor, Copenhagen, London, New York and Paris met in Geneva in June and agreed upon a standardized procedure for testing the four dried vaccines. The laboratory testing was started towards the end of the year and will continue throughout 1953.

WHO is co-operating in a field study in Madras on the use of hyper-immune gamma-globulin in the prophylaxis and therapy of variola major, undertaken by the Hooper Foundation of the University of California with the co-operation of the Director-General of Health of the Government of India and the health authority of Madras.

In 1952 smallpox control has been added to the project for the control of ankylostomiasis in Paraguay and to the diphtheria-pertussis immunization programme in Colombia.

### Smallpox

To obtain information on the keeping qualities of dried smallpox vaccine under field conditions, WHO sponsored a series of detailed laboratory experiments to determine the rate of loss of potency of four dried smallpox vaccines kept at different temperatures. The representatives of laboratories in Ann Arbor (Michigan, USA), Bandoeng (Java), Paris and Vienna supplied samples of their dried vaccine for testing, together with a "wet" preparation from the same strain of vaccinia virus. The