

## WHO at Fifty

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1998 marks the fiftieth anniversary of the World Health Organization. It is also the forty-fourth year that WHO has maintained an office in Thailand. Thailand was the first member of the Organization in what is now the South East Asia Region of WHO, and the second, after China, in Asia and the Pacific. Thailand committed itself to the Organization even before the Constitution was formally ratified. It may be useful to remember the early history of WHO, its founding principles and some of its achievements over the years.

The forerunners of WHO were L'Office International d' Hygiene Publique (OIHP) was established in Paris in 1907, with a permanent secretariat and a permanent committee of senior public health officials from twelve member States, nine of which were European.

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In 1919, the League of Nations was created and charged, among other tasks, with taking steps in matters of international concern for the prevention and control of disease. The health Organization of the League of Nations was set up in Geneva, in parallel with the OIHP.

In 1945, the United Nations Conference on International Organizations in San Francisco unanimously approved a proposal by Brazil and China to establish a new and autonomous international health organization. In 1946, the International Health Conference in New York approved the Constitution of the World Health Organization (WHO), and the WHO Interim Commission was set up. Already one year later, the Commission was active, organizing assistance to Egypt to combat a cholera epidemic.

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Finally, on 7 April 1948, the WHO Constitution came into force, when the 26th of the 61 States who signed it, ratified its signature and deposited its formal instrument of acceptance with the Secretary-General of the United Nations. This date—April the 7th, 1948—is considered to be the date of birth of the World Health Organization. That is why each April the 7th is celebrated as World Health Day.

Thus, WHO came into being as the logical response to centuries of aspirations of peoples around the world for freedom from disease and better health. WHO's Constitution defined health as "a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity." The Constitution also defined the following principles as basic to the happiness, harmonious relations and security of all peoples:

- 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, and 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 almost 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.

In order to recall some of the accomplishments made by Member States of the World Health Organization, we can begin with a sometimes-overlooked, yet quite astonishing fact—in barely fifty years,

human longevity worldwide has increased by more than 40%. The average life expectancy at birth has risen from around 46 years in the early 1950s to almost 65 years by 1996. This most important international public health achievement of the past half-century is a triumph for humanity. The World Health Organization (WHO) has played a vital, though often low-key, role in this accomplishment.

The half-century anniversary, which will be widely marked throughout 1998 in all of the 191 Member States of the Organization, provides an opportunity to remind ourselves of WHO's major contribution to international health in such areas as disease prevention and control, health promotion, disease eradication or elimination, standards and norms, environmental health, human resources and conceptual approaches to health development.

### **Smallpox Eradication—A Global First**

The best known example of WHO's accomplishments is the eradication of smallpox. Indeed, the benefits of smallpox eradication for public health are very impressive. In 1967, when WHO started international eradication efforts, smallpox,

was estimated to have afflicted up to 15 million people annually, of whom some two million died with millions more left disfigured and sometimes blind. In 1980, WHO was able to certify that the disease had been eradicated.

Had smallpox not been eradicated, the past twenty years would have witnessed some 350 million new victims—roughly the combined population of the USA and Mexico—and an estimated 40 million deaths—a figure equal to the entire population of Spain or South Africa.

What is less known is the fact that the eradication of smallpox was not the only success story. Nor was it the first one. Over the last fifty years, major efforts have been made to prevent and control a host of dreadful diseases. Some were more successful than others.

### **Disease Prevention and Control**

**Yaws:** The control of yaws—a crippling, disfiguring disease, which attacks children and leads to severe disability and loss of work capacity in young adults—was one of the first success stories. Virtually unknown outside the tropics, yaws afflicted some 50 million people worldwide in 1948. WHO

developed and launched a programme that encompassed research into the use of long-acting penicillin to cure yaws, active promotion of the new treatment approach, and direct assistance to governments, including Thailand, in designing and carrying out their national campaigns. Within 15 years, some 50 countries had benefited, and as a result, the global burden of yaws has been reduced to almost nil.

**Malaria:** Between 1955 and 1969, armed with DDT and other insecticides and the affordable drug chloroquine, WHO carried out a Global Malaria Eradication Campaign. As a result, the disease has disappeared from previously malarious areas that are home to 35% of the world's population. It has been eradicated from all developed endemic countries. Large areas of subtropical Asia and Latin America were freed or practically freed from the disease.

For other countries, especially those in tropical Africa that account for the bulk of today's global malaria-related morbidity and mortality, a new strategy had to be developed. Such a Global Malaria Control Strategy was developed and endorsed at the ministerial Conference on Malaria Control convened by WHO in Amsterdam

in 1992. In contrast to the eradication attempt era, the new Global Strategy called for disease control-oriented programmes. It recognized that malaria problems varied enormously from country to country, from area to area and even within different groups of the population, and that control efforts must be adapted accordingly, if they were to succeed. The objectives of the Strategy are simple to prevent people from dying from malaria and to reduce the suffering and social and economic costs it causes.

By 1997, globally, over 90% of endemic countries were implementing the new Strategy through their malaria control programmes. This is beginning to have an impact on malaria morbidity and mortality in countries as different as China, Solomon Islands, Philippines, Vanuatu, Viet Nam, parts of Ethiopia, some States of India, Brazil and Oman, and in Thailand as well. The implementation of the Strategy also helps other countries, such as those in North Africa and some countries in the Middle East, to maintain their malaria-free status.

**Childhood Immunization:** Millions of children have been saved every year through the Expanded Programme on Immunization (EPI), which was launched by WHO in 1974 against vaccine-preventable childhood diseases—diphtheria, pertussis, tetanus, measles, poliomyelitis and tuberculosis—and replicated in many countries. Today, close to 90% of children in the world are being reached by immunization services—a dramatic increase from the 5% vaccinated only twenty-five years ago. This has made a major contribution to the reduction in child mortality, from 134 per 1000 live births in 1970 to about 80 in 1995. Two million deaths from measles alone are prevented worldwide every year by current immunization efforts. A new vaccine against rotavirus diarrhoea, which causes 800,000 deaths each year, is currently being reviewed for licensing in the US and Europe.

**Tuberculosis:** In 1993, the World Bank World Development Report on Investing in Health ranked the WHO recommended TB treatment strategy called DOTS—Directly Observed Treatment Short-course—alongside immunization as one of the most cost-effective public health interventions. DOTS has cure rates as high as 95 %

and, with WHO's technical assistance, its use has rapidly increased from 10 countries in 1990 to 95 countries in early 1997. Tuberculosis continues to be the world's leading infectious killer of youth and adults, claiming 2–3 million lives each year. In fact, the worldwide epidemic of TB has been growing worse—particularly in developing countries—because of a number of factors. These included poor treatment practices, an increase in TB/HIV co-infection, the spread of multidrug resistant tuberculosis, and the collapse of public health systems. In 1993, WHO declared TB a global emergency.

**HIV/AIDS:** Between 1986 and 1995, WHO mounted an unprecedented international effort to halt the spread of this devastating disease.

The first challenge was to alert world leaders to the imminent threat of AIDS and to combat complacency and denial that were driving the problem underground. WHO then assisted its Member States to establish and strengthen their National AIDS Programmes, to carry out rapid assessments, and to improve diagnostic, laboratory and blood screening capacities. The Organization developed key elements

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of a strategy, which were used both in the countries and internationally to curb the spread of AIDS. It documented the course of the epidemic, established international reporting procedures and developed sophisticated new epidemiological tools for projecting the future spread of the disease.

WHO has been an unceasing advocate for cost effective strategies and technologies affordable for all countries, such as the promotion of condom use, early identification and treatment of sexuality transmitted diseases (STDs) and promotion of blood safety. The Organization was also a staunch supporter of the protection of human rights of people with HIV/AIDS.

In its work, WHO put special emphasis on the socioeconomic and behavioural determinants of HIV transmission, thus laying the foundations for the establishment in 1995 of the joint United Nations programme on AIDS (UNAIDS). WHO is a co-sponsor of UNAIDS and continues to put its technical expertise at the disposal of UNAIDS.

**Blindness and visual disability:** Thanks to WHO, the world knows today that these conditions, which can be provoked by a host of diseases, currently affect close to

180 million people worldwide of whom some 45 million are blind. For a long time and in many countries, the magnitude of this public health problem could not be assessed properly, and meaningful prevention activities could not be initiated. Internationally accepted assessment methodologies, developed by WHO, made it possible to create a WHO Global Data Bank on Blindness—an indispensable tool in planning international interventions against blindness.

WHO has also produced scientifically-based, field-tested and regularly updated strategies and technical standards to control specific blinding diseases. For example, and estimated 146 million people are expected to benefit from the implementation of a strategy for the elimination of trachoma.

**Onchocerciasis:** Considerable progress has been made in combating onchocerciasis, or river blindness—a tropical disease and the world's second leading infectious cause of blindness. In 1974, the Onchocerciasis Control Programme (OCP) was launched in West Africa. It was co-sponsored by WHO, the World Bank, the United Nations Development Programme (UNDP) and the Food and Agricul-

tural Organization (FAO), with WHO acting as the Executive Agency for the programme. Today, less than 25 years later, some 1.5 million people who were once affected have no trace of the disease. About 10 million children born in the operational area covered by OCP's activities are now free from contracting onchocerciasis. By the turn of the century, it is estimated that OCP will have prevented almost 300,000 cases of blindness. The successful vector control activities have opened up an estimated 25 million hectares of fertile riverside land for resettlement and cultivation. The land, which was previously deserted for fear of the disease, has the potential to feed an additional 17 million people annually.

**Cholera:** Even though cholera is still endemic in many countries of Africa, Asia and Latin America, its death toll has been reduced dramatically over the past 50 years. Through inexpensive, effective case management, WHO has made it possible to decrease the global cholera case fatality rate to the current 108% from more than 50% in the early 1950s. The disease remains a public health problem and requires constant attention both at national and international levels.

**Food Safety:** WHO has assisted its member States in strengthening national capacities to fight foodborne diseases—and an important cause of mortality, morbidity and reduced economic productivity in both developed and developing countries. Many food production and processing technologies, such as genetic modification, fermentation, irradiation and pasteurisation, have been assessed and provided the basis for internationally accepted recommendations and guidelines. WHO has also provided guidance on regulatory and educational measures to prevent food contamination. Through its Food Contamination Monitoring and Assessment Programme (GEMS/Food) the Organization has also gathered, evaluated and disseminated information on chemical food contaminants and on trends in foodborne diseases. This information provides the scientific basis for governments to formulate national policies for the prevention and control of foodborne diseases.

**Nutrition:** Since its inception, WHO has considered proper nutrition as one of health's cornerstones. It has assisted its Member States to develop national programmes to fight different forms of malnutrition—a major cause of morbidity and mortality

among children under five. For such programmes to be carried out successfully, WHO produced normative tools—scientific standards, human nutrient requirements, nutritional assessment criteria, and methodologies and guidelines.

Progress in reducing protein–energy malnutrition among infants and young children has been slow but real. In 1975, 36.4% of children under five years of age worldwide were malnourished, whereas by 1995, 27.4% of children (167.9 million) in this age were affected. Progress has also been made in overcoming micronutrient malnutrition, such as iodine deficiency—a significant public health problem in 118 countries with more than 900 million people suffering from goitre—and vitamin A deficiency, which affects 250 million children. Practical tools, developed by WHO to deal with vitamin A deficiency are widely used worldwide and include safe dosage recommendations during pregnancy and lactation and dosage schedules and guidelines for vitamin A supplements.

**Non-communicable Diseases and Tobacco:** The last half of the 20th century has seen an unprecedented rise of modern-day epidemics of non-communicable diseases.

Of these, the greatest is illness and death caused by tobacco, WHO estimates that in the last half of the 20th century, tobacco will kill 62 million people worldwide, more than the total number of people killed during World War II. WHO and its Member States have spared no effort to slow the progress of the tobacco epidemic. A ten-point comprehensive programme for successful tobacco control has been developed and used worldwide. And work is proceeding to prepare a new international framework convention for tobacco control.

The new convention is expected to come into force soon after the year 2000. When it does, the world will have new legal instruments to help control tobacco advertising that is increasingly international in its reach. New powerful tools will also be available to help control international smuggling of cigarettes—an estimated 400 thousand million cigarettes each year—upon which duty and taxes have not been paid.

**Cardiovascular disease (CVD):** WHO-promoted demonstration projects, like the North Karelia (Finland) CVD intervention project which resulted in an estimated 73% reduction in deaths from the disease in men between 1969 and 1995, showed

that prevention works. Thus, WHO has provided policy makers in both developed and developing countries with the scientific basis for their work.

**Newly Emerging Diseases:** After the 1994 outbreak of pulmonic plague in India and the 1995 outbreak of Ebola haemorrhagic fever in Zaire, WHO launched a special programme to fight newly-emerging and re-emerging infectious diseases and other public health problems, such as antimicrobial resistance. These dangers divert resources from control of endemic diseases and threaten international public health security.

Within the framework of the new programme, WHO assists its Member States in strengthening national infrastructures necessary to recognize, report and respond to communicable diseases, through training of epidemiologists, laboratory scientists and other public health specialists. Only reliable and timely national information can provide the foundation for regional or global action. The programme's other priority areas include global surveillance, control and information exchange for better management of and response to infectious disease threats.

**Standards:** In this work, WHO is supported by an international network of more than 400 collaborating laboratories and specialized disease surveillance centres in both developed and developing countries, as well as by bilateral donors, expert advisers and NGOs. The International Health Regulations are being revised to create a complementary global alert and response system.

**Health Promotion:** In addition to disease prevention and control, WHO has developed new approaches to health promotion as a major component of public health. These approaches are based on the premise that there is a health development potential in practically every organization or community. They focus on fostering health lifestyles, enabling people to take control of their own health, and creating conditions conducive to healthy living. Current WHO-promoted programmes include healthy cities, health-promoting schools, health-promoting hospitals, health at work, active aging and a Mega-Country Health promotion Network.

### **Disease Eradication of Elimination**

Inspired by the successful eradication of smallpox, WHO and its Member

States moved towards the eradication or elimination of other target diseases, when technically possible and cost-effective:

**Polio:** In 1988, WHO Member States collectively launched a new campaign to eradicate poliomyelitis by the year 2000. This disease was chosen because of the technical, financial and political feasibilities for success. At the time the global goal was set, fewer than 50% of the world's children were receiving the recommended three doses of Oral Polio Vaccine during infancy. Since then, 111 countries have conducted national mass campaigns to eradicate polio, in which more than one billion children—420 million in 1996 alone—have been immunized.

As a result, the reported global incidence of polio has declined sharply (by nearly 90%), from over 35,000 cases in 1988 to only 3,995 in 1996. In the Americas, polio was eradicated by 1991; it is on the verge of eradication in Europe and the Western Pacific; and is all but eradicated in many countries of Africa, the Eastern Mediterranean and South Asia.

This success was made possible by an effective and growing global antipolio coalition involving ministries of health in

endemic countries, Rotary International, UNICEF, WHO, donor countries such as Australia, Japan, the UK and the USA, as well as many other smaller partners. WHO estimates that about US\$ 1 billion in external resources will be needed to complete this important work.

**Leprosy:** The elimination of leprosy as a public health problem, i.e., reducing the number of cases to less than 1 in 10,000 in the total population, is also within reach today. It was the multidrug therapy (MDT) proposed by WHO in 1981 that finally opened the way to elimination of this physically and socially stigmatizing disease. From the 1980s when there were an estimated 12 million leprosy cases worldwide, today's estimate has been reduced to less than 1,150,000, with some 863,000 sufferers receiving MDT.

**Guinea Worm Disease:** In 1981, WHO began a global campaign against dracunculiasis, commonly known as guinea worm disease, within the context of the International Drinking Water Supply and Sanitation Decade. This joint effort, involving national control programmes and ministries of health, WHO, UNDP, UNICEF, the Global 2000 of the Carter Centre, bilateral

and multilateral funding agencies and NGOs, has been highly successful. As of February 1998, more than 100 countries, territories and areas were certified free of dracunculiasis transmission. In 1997, when compared to the previous year, the worldwide number of cases had dropped by approximately one third, despite an increase in reported cases in Sudan resulting from the intensification of surveillance. That same year, Yemen—the last endemic country outside the African continent—reported only 7 cases. India has reported no cases since August 1996. In the very near future, guinea worm disease may become the first parasitic disease to be eradicated by human effort.

**Chagas Disease:** A WHO-coordinated multi-country campaign to eliminate this disease in the southern cone of the Americas (i.e., Argentina, Brazil, Bolivia, Chile, Paraguay and Uruguay) is yielding positive practical results. In these countries, house infestation rates have dropped by 75 to 98% in some areas, while infection rates in young age groups have been reduced by 83%. The interruption of vector and transfusional transmission of the disease was achieved in Uruguay in 1997.

## Standards and Norms

In the past 50 years, WHO has developed more than 200 biological standards. The importance of WHO's work in the field of standardization of biological and pharmaceutical products—vaccines, drugs, blood products and hormones—cannot be overestimated. The greatest challenge in this work has always been to keep pace with the new substances being discovered and isolated from human tissue, and with new drugs and vaccines emerging from research and development. To work on various standards and norms, WHO has developed an international network of first-class scientists and national laboratories chosen for their excellence.

These standards and norms developed by WHO benefit all concerned: manufacturers, who can express the potency of their products in accepted international units; practicing doctors and their patients, who can be confident of having biological products of proven efficacy; and national health authorities, who can easily measure the value of drugs and vaccines placed on the market.

Within the framework of the Codex Alimentarius Commission (CAC)—and inter-

governmental body charged with the development of internationally agreed food standards— WHO and FAO have developed 237 food standards; 41 codes of hygienic or technological practice; 3,350 limits for pesticide residues and other food contaminants; and 760 food additives standards, CAC standards, guidelines and other recommendations are international points of reference to the World Trade Organization, thus facilitating growing international trade in nutritious and safe foods.

### **Environmental Health**

**Safe Drinking Water and Sanitation:** WHO was one of the initiators of the International Drinking Water Supply and Sanitation Decade (1981–1990), a broad-based international response to the enormous lack of services over most of the world. In 1980, only 40% of people in the developing countries had access to safe drinking water while only one out of five had a sanitary means of excreta disposal. By the end of the Decade, these proportions had doubled as an additional 1600 million were served with water and 750 million with proper sanitation. Capitalizing on the public interest and momentum built up during the Decade,

WHO helped launch the Water Supply and Sanitation Collaborative Council, which today provides an increasingly effective forum for representatives of national governments, development agencies and NGOs to find common solutions to water supply and sanitation problems.

**Chemical Safety:** The proliferation of chemicals, of which there are currently some 100,000 on the market, and hence the need for their safe use, has become a public health problem. In 1980, WHO together with the International Labour Office (ILO) and the United Nations Environment Programme (UNEP), established the International programme on Chemical Safety (IPCS). Ever since, IPCS has assessed some 1000 food additives and contaminants, and 220 pesticide residues and 70 veterinary drug residues in food, and has finalized more than 132 Poisons Information Monographs. International Chemical Safety Cards, which provide information for workers who handle chemicals in the workplace, have been produced in several languages for some 1000 commonly used chemicals. WHO's Recommended Classification of Pesticides by Hazard and Guidelines to Classification have been adopted by the

United Nations Committee of Experts on the Transport of Dangerous Goods. Comprehensive risk assessments of 200 so-called "priority chemicals," from arsenic to xylene, have been published.

Since its inception, IPCS has also been assisting developing countries in human resource development and capacity building for the sound management of chemicals, including the establishment of poison information centres.

**Water and Air Quality:** WHO has issued, and regularly updates, Guidelines of Drinking-Water Quality. The three-volume publication examines microbiological biological, chemical and radiological aspects of drinking water. It evaluates 36 inorganic constituents, 27 industrial chemicals, 36 pesticides, four disinfectants and 23 disinfectant by products. These guidelines are widely used by WHO Member States. WHO has also prepared similar guidelines for air quality.

### **Indigenous Human Resource Development for Health**

In 1960, the UN Secretary-General called on WHO to provide emergency assistance to the newly independent

Democratic Republic of the Congo. The medical situation at that time was acute: most of the 761 foreign doctors who had been part of the national medical service had left the country, and there was not one single medically qualified Congolese.

WHO quickly recruited and sent to the Congo up to 200 qualified personnel to work as field staff. But, most importantly, the Organization set up a training programme for high-level medical personnel to assume responsibility for the Congolese health service. By the end of 1967, all responsible posts in the health service had been filled by Congolese medical officers.

This is only one of many examples of WHO's work in assisting its Member States to develop indigenous health-related human resources for health. As early as 1948, the Organization launched a comprehensive system of WHO fellowships. To date, around 120,000 recipients have acquired new skills and returned home to put them to good use.

### **Concepts of Health Development**

After the first 20 years of international public health experience, it became evident for WHO that a conceptual

framework was needed to optimize international public health work, to rally supportive partners around internationally-accepted goals and to sustain a high level of political commitment.

**Primary health Care:** Together with UNICEF, WHO developed the concepts of primary Health Care (PHC), which is a blend of essential health services, personal responsibility for one's own health and health-promoting action taken by the community. International public health experience clearly demonstrated that PHC is a universal concept, applicable in both developed and developing countries. Everywhere the essential components of PHC were recognized as indispensable for health development. PHC includes at least health education, the promotion of proper nutrition, adequate safe water, basic sanitation, maternal and child health care, including family planning, immunization of common ailments and injuries, and the supply of essential drugs.

**Essential Drugs:** In an effort to bring greater equity and rationality to this important component of PHC, WHO has also developed and promoted the concept of Essential Drugs. Amongst the thousands

of drug substances marketed in the world, WHO concluded that only a small part (about 200) of them could be considered truly essential in medical practice. Thus, the first WHO model list of essential drugs (generic names) was born. Now this list comprises about 250 essential drugs and vaccines—many of them no longer protected by patent rights and hence available to a large public at competitive prices.

**Health For All:** The basic concept of primary Health Care has also served as a vehicle for the implementation of the Health For All strategy (HFA)—a public health approach to health development based on the principles of social justice and equity. Adopted in 1979, HFA initially covered the period until the year 2000. However, HFA is a strategic process leading to progressive improvement in the health of all people, not a single finite goal. Thus, Health for All by the Year 2000 is only the initial stage of that process, which is being developed further by WHO and its member States into Health for All in the 21st Century.

In virtually all of the programmes described above—excluding those like onchocerciasis control and Chagas disease

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elimination, which are geographically defined. Thailand has been a valuable partner with WHO. The country now contributes a great deal to the work of the organization, particularly in the provision of technical expertise and training opportunities. In fact, as many WHO-sponsored fellows come to Thailand each year, as go to the United States. The WHO Representative's Office in Bangkok processes up to 1000 applications for training in this country yearly.

Thailand can also be proud of its 22 WHO Collaborating Centers, centers of excellence recognized by the Organization for accomplishments in research, training, or planning and implementation of operational health programmes. The Department of Nursing of the Ramathibodi Hospital and the Faculty of Nursing at Siriraj Hospital

have joined together to form a Joint Collaborating Center in Nursing, and this is one of the more recent programmes to be formally so recognized in Thailand.

These are some, but by no means all, examples of WHO's work in international health development during the first fifty years of its existence. These accomplishments could not be realized without the support of governments, and Ministries of health in particular, other international organizations, professional associations and the private sector the world over. The peoples of the world can gain confidence from these accomplishments in international public health and look forward to other hard won achievements by the WHO-led coalitions for health in the twenty-first century.