FOUR DECADES OF ACHIEVEMENT

HIGHLIGHTS OF THE WORK OF WHO

WORLD HEALTH ORGANIZATION, GENEVA
Four decades of achievement

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WHO headquarters in Geneva, Switzerland, is open 24 hours a day, seven days a week, ready to respond in the event of a major health emergency. For 40 years WHO's member countries have turned to the Organization, quietly or publicly, when confronted with an epidemic.
Foreword

Forty years have elapsed since men and women of goodwill and foresight laid the foundations of the World Health Organization. They approved a Constitution which stands as a tower of lucidity and organizational sense, clearly setting out WHO’s mission as the directing and coordinating agency for international health. Hopes were high: for the first time in history there would be a truly global cooperative enterprise to protect and promote human health. The stakes were also high: half the world lay in ruins after a devastating war. In the poor countries infectious diseases and diseases of poverty were rife, and there was practically no organized health care.

The immediate priorities were therefore to build up health care systems in the war-torn areas and to combat the epidemic diseases that were threatening the globe. However, over the years it became clear that little would be achieved without the improvement of the overall social and economic situation: hence the global mobilization around the goal that came to be called “health for all by the year 2000”.

Approaches and strategies have changed over the years to suit the priorities of the time as expressed by WHO’s member countries. But the ultimate aim has been clear from the very beginning: health for all in the sense of the definition given in the WHO Constitution — “not merely the absence of disease” but a “state of complete physical, mental and social well-being”.

After the uncertainties of the early years, and the certainties of adolescence, WHO has now come of age: mature enough to draw conclusions from the past and take stock of the present, and young enough to look into the future with the right mixture of vision and realism.

As we enter the 1990s, with its own problems and against a background of spreading egoism and nihilism about development, it is particularly useful to look back. We can be proud of our record. The elimination of smallpox was a triumph, hailed as an achievement on a par with the conquest of space. But there are many other successes, some of them described in this book. They tell the story of what can be achieved when nations work together hand in hand, changing tactics and emphasis over time, but doggedly sticking to the health path and keeping the ultimate goal clearly in mind.

As you will see from the following pages, the groundwork for health for all has been laid. What will be needed in the coming years is action, not only by health workers, but concerted action by every woman, man and child to protect their own health — and support from all levels of society to help them do so by ensuring a healthy social, physical and economic environment. In the shadow of the worldwide AIDS epidemic, worldwide collaboration for health is needed more than ever. WHO will be proud to provide, as in the past, the neutral umbrella and nourishing framework so essential for success.

Halldan Mahler, M.D.
Director-General
World Health Organization
The world in 1948 was war-weary and disease-ridden. Diseases ranging from malaria to plague clamoured for attention. Facing this enormous challenge was a fledgling World Health Organization with a total staff of just 200. While WHO immediately began tackling these problems across the board, there were painful choices to make about relative priorities.

Fifty million infected

One of the diseases singled out for special attack by WHO's membership was yaws, which afflicted some 50 million people. Virtually unknown outside the tropics, yaws is a crippling and disfiguring disease caused by a treponeme — a germ of the same family as that which causes syphilis. Spread not sexually but by poor hygiene, yaws attacks children and leads to severe disability and loss of work capacity in young adults.

It was known that penicillin could cure yaws, but only through a course of treatment involving several injections — a luxury beyond the means of the poorer countries. In 1948 came a scientific breakthrough that the new World Health Organization was quick to seize on: long-acting penicillin; a single shot of which would be enough for cure. WHO promptly coordinated research to determine the best preparations and doses.

Once the answers were in, WHO set about persuading doctors that a mass campaign had to be conducted along different lines from individual treatment of yaws cases. By publishing authoritative scientific information, by organizing international symposia at which the main issues could be debated, WHO helped modify the
traditional clinical outlook of practising doctors. To encourage use of the new treatment approach, experts were sent to other countries to see it in operation, and WHO fellowships were granted to doctors, laboratory workers, nurses and others to help ensure enough trained personnel for the campaigns. At the same time, WHO provided direct assistance to governments in designing and carrying out their national campaigns. By the early 1960s, 49 countries had benefited from cooperation in the form of visits by WHO staff and consultants selected by WHO for their technical expertise.

The control of yaws thus became a success story in countries as diverse as Nigeria and Thailand. The disease was not eradicated but its burden was reduced to almost nil. In Haiti alone, mass treatment returned 100 000 persons to productive work. In Indonesia, where the largest such national campaign in the world was conducted, over 31 million people were examined and almost 4 million treated between 1950 and 1956 alone. Significantly, the Indonesia campaign hit on the idea of using people selected from the community itself and given a short period of training. This pioneering approach was later to catch on in many other parts of the world.

Of standards and scientists

A problem that cropped up early in the yaws campaign was the lack of uniformity among the various preparations of long-acting penicillin. Different preparations, given in the same dosage, were reported to have different effects on the disease.

It became urgent to set standards for this product and for many others — a role specifically entrusted to WHO by its Constitution. The standardization of biological and pharmaceutical products (vaccines, drugs, blood products, hormones) was in fact a task inherited by WHO from earlier efforts carried out under the aegis of the Health Organisation of the League of Nations. Standardization was an ongoing task that had to keep pace with the new substances being discovered and isolated from human tissues, and with the new drugs and vaccines emerging from research and development. Not even the Second World War had brought the work of international biological standardization to a complete standstill, which shows just how vital it was — and still is.

The groundwork for a standard is laid in the laboratory — preferably, in a number of laboratories so that results can be cross-checked and compared. The question arose: Should the World Health Organization set up its own laboratories and have its own staff carry out what scientists call the “bench work”?

Together, the member countries of WHO decided that this would not be the most cost-effective approach. Instead, the Organization would become the coordinating force behind a network of first-class scientists and national laboratories chosen for their technical excellence and pledged to work, through WHO, for the benefit of all humanity. Thus sprang up the twin concepts of the “WHO expert committee”, a group of eminent scientists from around the world selected for their expertise in a given subject, and the
"WHO collaborating centre" — an existing laboratory, institute or university department of high standards willing to share its expertise and resources with others.

The WHO expert committee on biological standardization has met every year since 1951 to formulate its recommendations for international standards. No fewer than 200 international standards have been developed; the physical substances are retained for the Organization by its network of WHO reference centres. This work benefits all concerned: the manufacturers of drugs and vaccines, who can express the potency of their products in accepted international units; practising doctors and their patients everywhere, who can be confident of having biological products of proven efficacy; and national health authorities, who can more easily measure the value of drugs and vaccines placed on the market.

The secret of this particular success? WHO's standing in the scientific community. Only an organization respected by researchers and scientists is in a position to attract the world's finest talents and recruit them, unpaid, into international health work. For the WHO experts who serve on the Organization's expert committees receive no monetary reward — yet their expertise is channelled, through WHO, to the benefit of people everywhere.

It is an indication of the Organization's prestige that Albert Sabin, father of the live polio vaccine, chose WHO to be the repository of his precious unpatented poliovirus strain, from which generations upon generations of vaccine were drawn at no cost, and thanks to which untold millions of children have been spared disablement and death.
Working with others

From the beginning, then, WHO set out to work not through its small staff alone but with and through others. Many thousands of individual researchers and scientists, including Nobel laureates, have put their talents at the disposal of the Organization — and their number continues to grow. In the period 1968-1988 some 5000 WHO experts were on call. The same is true of the WHO collaborating centres, which have grown steadily in number and breadth of disciplines.

WHO from the outset was also mandated to work with other agencies within the newly created United Nations family of organizations. Nutrition work, for example, quite naturally came to involve FAO (the Food and Agriculture Organization of the United Nations), as did work against animal diseases. Programmes aimed at educating teachers on how to deal with mentally retarded children came within the purview of UNESCO (the United Nations Educational, Scientific and Cultural Organization). Occupational health was a shared activity with the International Labour Organization. Drug dependence and abuse called for collaboration with the United Nations Division of Narcotic Drugs.

WHO’s closest partner was UNICEF, the United Nations Children’s Fund, with which, for example, the yaws campaigns were carried out. To guide their concerted efforts in all fields, the two agencies established a joint committee on health policy which is still in existence. According to the principles laid down by this committee, UNICEF’s role in health programmes was to furnish the required supplies and services, while WHO, with its constitutional mandate as “the directing and coordinating authority on international health work”, was responsible for studying and approving the plans. Over time, WHO also began to provide much of the international health personnel for the joint projects.

The invaluable contributions made by WHO and UNICEF during the first decade of their collaboration ranged over practically every subject of importance for child health: tuberculosis, syphilis in pregnant women and children, malaria, training and fellowships, maternal and child health, nutrition, environmental sanitation, health education, milk hygiene — the list is a very long one. In later years the intimate partnership with UNICEF was
to evolve considerably, both in the scope of the issues tackled and in the way in which the two organizations strove to be complementary. What has not changed is their common goal: promoting the survival and well-being of infants and children everywhere.

Collaboration was also initiated with professional, charitable and other nongovernmental organizations pursuing aims consonant with those of WHO. By the end of the first decade, WHO had established official relations with no fewer than 40 such bodies, ranging from the International Council of Nurses to the International Society for the Welfare of Cripples, and from the World Federation of Mental Health to the International Leprosy Association. Work of vital importance for WHO's membership has been made possible through the enthusiasm and resources of these valuable organizations, which have in turn benefited from the moral support and the technical information provided by WHO. Such programmes continue unabated to this day. Recent examples are joint work on cancer pain relief with the International Union against Cancer, and efforts through the Global Programme on AIDS to ensure the safety of blood transfusions in collaboration with the League of Red Cross Societies.

The success of these joint ventures is most strikingly illustrated by the ever-lengthening list of nongovernmental organizations admitted into official relations with WHO, which now number about 160. Their vital contributions are yet another bonus that carries little or no price tag for WHO's membership.

For sanitation and safe water

Innumerable diseases caused by parasites, bacteria and other organisms were being spread in 1948 through unclean drinking-water and the unsanitary disposal of human wastes. The problem of sanitation was especially awesome, and all the more so because human wastes were a taboo subject almost everywhere. All too often, sanitation needs were shelved or postponed indefinitely. It fell to WHO to drive home the message that, for the sake of health, sanitation should occupy as high a rung on the national priority ladder as clean drinking-water.

If WHO's technical contribution to sanitation projects around the world was small in monetary terms during the first decade, it served to catalyse a great deal of governmental and, especially, community action. In many projects, the contribution of local communities in terms of money, local materials and labour — for example, in building pit latrines — by far exceeded the combined support of WHO and the government. In some cases the catalytic effect was measurable. In Japan, for instance, WHO agreed to cooperate in settling the conflict between the agricultural value of night-soil as a fertilizer and its dangers to health. The Organization helped the government to design, construct and operate a composting plant in which refuse and human excrement could decompose at an accelerated rate. First a small pilot plant and then a full-scale prototype proved that fermentation generated enough heat to sterilize all disease-carrying organisms. The Ministry of
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Health and Welfare promptly budgeted a sum equivalent to more than US$ 1 million to subsidize similar composting plants in ten Japanese cities.

But no matter how high the priority accorded by governments to water and sanitation, the sheer cost of providing the whole population with the proper facilities was an insurmountable obstacle in the poorer countries. International lending agencies did exist 40 years ago, but they considered very few such projects worthy of support. Only urban communities dared apply for funding, and even then, exclusively for water supply projects. Waste disposal projects stood little chance.

Today, not only urban projects but scores of rural water supply and sanitation programmes have attracted international funds as a result of WHO's insistence on the vital health benefits of both safe water and sanitary waste disposal and its careful building of trust with lenders and donors — an effort that began in earnest in the second decade. WHO has also managed to convince decision-makers that setting up a water supply or sanitation system can be a complete waste of money unless the community to be served gives it full support. Without community members who are trained and eager to maintain the system in proper running order, it will fall into decay — and the landscape in many places is littered with just such expensive failures. Projects nowadays are thus giving a welcome emphasis to people, not just pipes.

WHO membership pays off

In addition to providing direct cooperation to every member country that requests it, WHO promotes, coordinates and carries out a series of “global” functions that no individual country could undertake.

• WHO collects, analyses and disseminates information on how various health problems, ranging from AIDS to the zoonoses, have been tackled by different countries. This means that member countries can learn about pitfalls without falling into them, and can build on each other's successes.

• Scientists and health workers in all countries have a ready source of wisdom to tap: that of WHO experts. Authoritative, state-of-the-art reports produced by WHO expert committees on a wide range of technical and public health subjects are published at low cost by the Organization.

• WHO and FAO coordinate the development of food standards that specify maximum levels and types of food additives and pesticide residues, among other things. Observance of these international standards by food manufacturers and exporters ensures the safety of food for consumers. It also helps to avoid the rejection of produce by importing countries and heavy economic losses to the exporting countries.

• Analysing the health impact of the many chemicals in use today is an expensive enterprise. WHO has thus far issued authoritative reports on 64 such substances based on extensive testing carried out in collaboration with other United Nations agencies. This figure is expected to double very soon.
The second decade: 1958-1968

The second decade of the World Health Organization saw the emergence of many independent states of Africa. Member countries from this region grew from a mere handful to 29 in the space of ten years. WHO's priorities were necessarily influenced by the needs of their populations, afflicted with numerous epidemic and endemic diseases, handicapped by a lack of health workers and facilities — but free to shape their own destinies.

Averting disaster

In July 1960 the Secretary-General of the United Nations called on WHO to supply emergency assistance to the newly independent Democratic Republic of the Congo. Most of the 761 foreign doctors who had been part of the national medical service had left the country, and there was not a single medically qualified Congolese.

The Organization's response was extraordinarily rapid by any measure. A group of WHO staff members with expertise in various aspects of public health flew to Leopoldville (now Kinshasa) to help draw up a plan of action. They recommended:

- an advisory team to be attached to the Ministry of Health;
- emergency medical care teams to be positioned at key points in the country, and field staff to be assigned to the most affected areas;
- urgent anti-epidemic measures; and
- the training of Congolese health personnel.

By 31 July the WHO adviser to the Minister of Health had taken up his duties as chief of the advisory team. The collaboration of the International Committee of the Red Cross and the League of Red Cross Societies was enlisted; they provided 33 emergency care teams. WHO itself recruited up to 200 physicians, sanitary engineers, nurses and technicians as field staff. Most important, the Organization quickly set about training higher medical personnel to take over responsibility for the Congolese health service. An emergency fellowship programme for study abroad turned some 140 "assistants médicaux" into fully trained doctors. In addition, local training in Kinshasa was arranged for 75 hospital administrators, 64 sanitarians, 48 radiology technicians and 18 pharmacy assistants.

By the end of 1967, all responsible posts in the health service had been filled by Congolese medical officers. And, apart from a smallpox outbreak in 1961, major epidemics had been successfully averted.
Pollution, whether visible or invisible, does not stop at national frontiers. After the disaster at the Chernobyl nuclear power station in the USSR, WHO with the help of national experts provided information to governments about the measures needed to protect the health of their citizens. In partnership with the International Atomic Energy Agency, WHO is refining methods to ensure an improved response in the event of future emergency.

This was not, alas, to be the last emergency facing a Member State. Again and again, WHO and other collaborating agencies have rushed to give special assistance to countries afflicted with drought, or populations of refugees and displaced persons. Increasingly, however, WHO has been emphasizing the need for countries to prepare themselves better for coping with disasters. Training courses on disaster preparedness are constantly in progress, as are efforts to help countries lay the groundwork for health systems less easily disrupted by natural or man-made disaster.

Training for health

It did not take the Congo emergency to convince WHO that countries needed more, and better trained, health personnel. As early as 1948 it had launched a comprehensive system of WHO fellowships. The Organization deliberately did not create its own training institutions. Instead, it found countries everywhere that were eager to collaborate by opening their schools to WHO fellows and by supplying teachers for countries elsewhere that needed help in starting or improving their own training schemes.

The fellowships granted were for study in various fields: health services, control of communicable diseases, clinical and basic medical sciences. In some cases, particularly as the newly independent countries of Africa joined the Organization, a fellowship was given for a full medical education; in other cases, the fellow was already a qualified nurse, doctor, X-ray technician or sanitary engineer sent for advanced study.

From a total of 6000 fellowships granted in the first decade, the number almost tripled in the period 1958-1968. Evaluations of the effectiveness of the fellowship system, carried out periodically, showed that while there were occasional failures — some fellows were not suitably employed on their return home, or never went back at all — the outcome was good in well over 90% of cases. Gradually, as the developing countries built up their human resources, fellowships began to be awarded more for teacher training and for study within the fellow’s own country.
The full impact of WHO fellowships on the health services of WHO’s member countries can only be guessed at. Altogether, by the end of 1987 almost 90 000 WHO fellows had acquired new skills and returned home to put them to good use, in many cases by training still others. This precious ripple effect means that the benefits actually reaped by countries have been even greater than the simple figures suggest.

Collaboration with industry

Some sort of balance between humanity and the rest of the animal kingdom should, it is now accepted, be carefully preserved. But even the most prudent ecologist would agree that the insect carriers of disease should be given no quarter. Indeed, the history of struggle against disease is largely the history of warfare between our species and the mosquitos that transmit malaria and yellow fever, the biting flies that carry sleeping sickness, the ticks that spread encephalitis, and other “vectors” or carriers.

From its second decade, WHO decided to enlist the collaboration of the chemical industry in supplying new weapons for our side. It was important to have alternative compounds to turn to when the insects cleverly became resistant to the old ones. Moreover, it was hoped that new products could combine greater effectiveness with less toxicity.

The resulting partnership has been exceptionally fruitful. The scheme is simple. Industrial chemists do the initial laboratory work of compounding new products and screening them for effectiveness under laboratory conditions. The most promising compounds are then evaluated by WHO’s network of collaborating centres and scientists; where warranted, they are tested under field conditions. Temephos, an insecticide that emerged as a winner from this joint testing scheme, was used in West Africa to spray an area of some 750 000 square kilometres around the fertile Volta River Basin and practically rid it
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of the blackfly that spreads onchocerciasis or "river blindness".

In the same way, WHO has worked with pharmaceutical companies and other United Nations agencies to catalyse the development of drugs against tropical diseases — drugs that would not otherwise have been developed as they would find no ready market in the industrialized world. A successful example of this collaboration again concerns river blindness. In 1978 scientists from a major pharmaceutical company first observed in animals that a compound called ivermectin appeared to destroy Onchocerca worms similar to those which cause human onchocerciasis. Together with two WHO collaborating centres, they first confirmed the drug's effect in both horses and cattle and then went on to test its effectiveness and safety in human beings. Further clinical testing showed that a small annual dose of ivermectin in hospitalized onchocerciasis patients gave safe, effective, long-term results. The drug has been registered for human use and large-scale field trials have been initiated, but already the company has announced its decision to make ivermectin available free of charge to all onchocerciasis victims everywhere who need it — with the assistance of the World Health Organization.

Ivermectin will help to consolidate and extend the benefits of onchocerciasis control in West Africa, where some four million children born since 1975 no longer run the risk of going blind and where the populations who previously fled the blackfly are settling into a more normal and productive life in the fertile river valleys.

WHO paves the way for cost-containment

No country can afford wasteful ways of providing health care. In some parts of the developing world, national health budgets are so tight that every bit must be made to count. And the industrialized countries can no longer tolerate health costs that spiral upward at a rate beyond the overall rise in the cost of living. Here are some ways WHO helps its members to contain health costs:

• WHO encourages and coordinates the assessment of sophisticated health technology by a network of WHO collaborating centres. The result, available to all member countries, is an independent, objective evaluation of what kinds of equipment and techniques work, and of when they are really needed.

• Even where equipment is relatively unsophisticated it can eat up much of the health budget — and in many developing countries, tragically, up to a third of all equipment is estimated to lie unused for most of its lifetime. The reason? Equipment tends to be inappropriately purchased and poorly maintained. WHO's remedy: training in the selection of appropriate equipment and in maintenance and repair.

• In some countries with comprehensive dental services and a high prevalence of tooth decay, the cost of dentistry and oral health care used to reach a staggering fifteen percent of all health expenditure. WHO's advocacy of the use of protective fluorides, both in community water supplies (or in salt) and in toothpastes and rinses, has cut the rate of tooth decay in developed countries to one-half or even one-fifth of what it was before. In developing countries where tooth decay was on the rise, the trend has been halted or even reversed.
Order from chaos

In 1962, the year in which WHO launched its immunology research programme, this relative newcomer among the biomedical sciences was entering an exciting era. Hardly a month went by without a fresh report of the discovery of a new antibody fraction — or were these new? For the various immunologists used different Greek and Roman letters or numbers to identify their fractions. Few scientists could keep afloat in this alphabetic soup of notations and nomenclature.

With careful advance preparation, WHO called a meeting of world experts that culminated in an agreed nomenclature of the immunoglobulins. Published in the Bulletin of the World Health Organization and thus brought to the attention of the world scientific community, the nomenclature agreement meant that researchers everywhere would henceforth speak the same language. They would build on each other’s findings, thus speeding progress and avoiding inadvertent duplication of work.

Soon after, WHO spearheaded similar efforts on behalf of researchers working on human leukocyte antigens (HLA), the substances that help predict whether a transplanted tissue such as a skin graft will “take” or whether it will be rejected by the body’s immune system. The resulting HLA nomenclature and the standardized terminology for tissue typing have played a key role in the rising success rate of transplanta-

WHO has developed treatment strategies and training materials that enable general health workers to manage many mental and physical illnesses that used to be considered treatable only by specialists or in hospitals. A good example is epilepsy, a disease affecting at least one person in 200 and carrying a needless stigma of shame. Today, with WHO’s guidelines, a community health worker can provide the simple drug treatment that is effective in the vast majority of cases, helping youngsters with epilepsy to be just part of the crowd.
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tion, especially of kidneys. At a time of soaring health costs in the industrialized countries when keeping a person alive on renal dialysis (the "artificial kidney") can cost as much as US$ 40 000 a year, a successful kidney transplant not only means a life of greater quality but translates into a lifetime saving of hundreds of thousands of dollars.

Helping researchers and practitioners from around the world to speak the same language has in fact been a hallmark of WHO's action from the start. The task has never been an easy one. Experts are understandably partial to their "own" term for a substance or method or disease, especially when the name suggests their pioneering role in discovering it. It is the Organization's solid reputation in scientific and public health circles that has enabled it to play this leadership role in virtually every field in which it has been involved since 1948.

The achievements are too numerous to list. In mental health, for example, glossaries, disease classifications and diagnostic tools have been worked out for use by general practitioners, specialists, and primary health workers with little training. What is significant about these tools is their proven applicability in different cultures and social groups, which makes possible accurate international comparisons and communication about disorders such as depression, schizophrenia, epilepsy and Alzheimer's disease. WHO's diagnostic tool for assessing mental status, for instance, has been translated into 26 languages and is used around the world. In other fields, recent nomenclature advances include the standardization of terms used in acupuncture and, at the opposite pole, agreement on terminology in AIDS.

Crowning all these achievements is the international classification of diseases, whose establishment and updating is a global responsibility inherited by WHO in 1948. Now being updated for the tenth time, this elegant classifying tool makes it possible to code the full range of illnesses and causes of death, and hence to get a picture of the main health problems and health priorities of a given country. And, because the classification is universally applicable, health statistics can be compared over time and between countries. WHO periodically compiles such statistics from around the world. The resulting global picture, called the world health situation report, is what alerts the Organization's membership to neglected trouble spots and helps it establish priorities for action.

**Tuberculosis: establishing the facts**

In 1958, by WHO's conservative estimate, about 60% of the world's population was infected with tuberculosis, there were some 20-30 million active cases, and between one and two million of these sufferers died every year. Some countries had been able to reduce the prevalence of the disease, although they were staggering under the financial burden of hospital treatment costs. In the developing world, the problem was still growing, despite the advent in 1951 of isoniazid, the first antituberculosis drug that lent itself to mass application.
Rather than continue blindly with traditional clinical approaches, WHO decided the time had come to establish the facts. Large-scale studies were launched in Madras, India, to settle a series of practical questions about a population-based approach to tuberculosis control.

The findings that emerged from this WHO-sponsored research were dynamite. It turned out that well-supervised drug treatment at home — without bed rest or a special diet or nursing care — was every bit as effective as hospital treatment with the same drug regimen. Moreover, patients living at home did not expose their families to any special risk, contrary to what had been feared.

The scientific demonstration that hospitalization for a year or more in a tuberculosis sanatorium had become unnecessary flew in the face of conventional ideas, not to mention financial interests. But WHO had established the facts carefully, opening the way to real tuberculosis control in the developing countries. So far, though, it is the industrialized countries that have benefited most from the massive cost savings made possible by this revolution. Like other examples that will be described later, this is a case of the developed world learning — through WHO — from the developing world.

WHO demonstrated once and for all that tuberculosis patients did not need to be hospitalized for years in an expensive sanatorium. They could get well simply by taking their medicine at home. Solid facts such as this one are not always welcomed warmly, especially when they are perceived to conflict with special financial or professional interests. Over the long term, however, the Organization’s insistence on establishing the facts has helped to rationalize health care, lowering costs in the richer countries and expanding access to care in the poorer ones.
The third decade: 1968-1978

Smallpox eradication: a historic "first"

WHO's intensified programme for the eradication of smallpox began in 1967. It ended in 1977, triumphantly, with smallpox vanquished forever: the first major human disease to be wiped off the face of the earth. The giant eradication campaign, which mobilized the determined efforts of national health workers, WHO staff and donor countries, thus dominated the entire third decade of the Organization. But alongside this determination was scepticism. Not until the very end of the campaign did the doubters become convinced that global eradication was attainable.

In 1967, smallpox was endemic in 31 countries with a total population of over 1000 million people. In that year alone, according to WHO's estimates, between 10 and 15 million people were stricken with smallpox; of these some two million died and millions of survivors were left disfigured or even blind. At the same time, countries where the disease was no longer endemic were still not safe from the introduction of smallpox. In 1967 alone, such countries were estimated to be spending hundreds of millions of United States dollars to gird themselves with a protective cordon sanitaire: all newborn babies were vaccinated; periodic revaccinations were carried out, especially among military personnel and travellers abroad; health
controls stood guard at all ports and frontiers to keep out visitors unless they could produce a valid certificate of smallpox vaccination.

On 26 October 1977, in Somalia, the last human being fell victim to endemic smallpox.

The history of the spectacular programme that conquered this ancient scourge has now been written. Smallpox and its Eradication, published in 1988 by WHO, will help ensure that the severity of the disease and the lessons learnt during the global eradication effort will not be forgotten by future generations.

The technical "lessons" of the campaign have already been of enormous practical benefit to many of the programmes launched during WHO's fourth decade. But two questions are often asked by the public. What has smallpox eradication meant for the world in practical terms? And could the disease not have been eradicated without WHO?

The first question can be answered in figures, although these are so staggering as to be almost ungraspable by the human mind. If the disease had not been wiped out, the past decade would have seen 100 to 150 million victims and some 20 million deaths. Along with the prevention of suffering, disfigurement and death, however, the world has gained from increased productivity, saved on care of the sick, and has benefited from the luxury of abandoning the costly cordon sanitaire.

The most conservative estimates are that smallpox eradication — a 13-year campaign that cost the world US$ 330 million in all — has brought the world a net economic return of more than $1000 million, annually, surely one of the best investments in public health that has ever been made.

The sometimes unorthodox methods of the smallpox eradication campaign raised eyebrows at the time — but they worked. One method was the use of financial incentives to encourage people to report active cases. The rewards were small in the early stages, and became larger as the campaign neared its goal. This poster shows the last reward offered, in an effort to ensure that the disease had really been wiped out everywhere. It was never collected. Smallpox had indeed been eradicated, and this fact was officially certified by a global commission on 26 October 1979.
And could the world not have eradicated smallpox without WHO? The best answer seems to be that in 1967, despite a century and a half of vaccination, millions were still dying of the disease. What WHO offered was:

- its energy and prestige as a catalyst of global efforts bringing together scientists, governments, health workers, and ordinary citizens;
- its position in the scientific vanguard: again and again, technical difficulties that cropped up were overcome through prompt WHO-coordinated research;
- its neutrality and independence of national rivalries and suspicions.

This last point deserves some amplification. What it took for the world to eradicate smallpox cut across national borders. Giant efforts on the part of the countries where the disease was endemic, such as India and Ethiopia, whose health teams had to vaccinate and track down cases, were bolstered by the technical and managerial support of WHO and by the very considerable material support that flowed from many industrialized countries, such as the USA and the USSR, in the form of donated smallpox vaccine, equipment and money. A glance at the political maps of the countries involved — many of which were not on the most cordial of terms with each other — shows how unlikely they would have been to cooperate with each other directly.

Thanks to WHO’s “neutral umbrella”, countries of differing economic status and ideological outlook joined forces to combat and overcome this disease that had scourged humanity since the dawn of history.

Towards universal childhood immunization

In 1974, before the final goal of smallpox eradication had been reached, WHO established its Expanded Programme on Immunization, which was directed against the vaccine-preventable diseases of childhood such as measles and polio. At the time, fewer than 5% of infants in the developing countries were fully protected against these killing and maiming diseases. Today, some 70% of such children have access to immunization services, while over 50% are receiving a full course of three doses of polio vaccine or of DPT, the three-in-one vaccine that protects against diphtheria, pertussis (whooping cough) and tetanus.

WHO’s role in this growing public health triumph has been its traditional one of catalyst. The Organization worked hard to sensitize health ministers and the world community to the importance of childhood immunization at a time when such services were largely being ignored. These promotional efforts have borne fruit in the developed as well as the developing countries. For example, WHO’s Region of the Americas has pledged to eliminate polio from the New World by 1990.

The Organization’s technical leadership has been just as important. To take one example, before 1974 there was
no systematic testing programme to ensure the suitability of the "cold chain" equipment required to keep vaccines chilled (and thus potent) from the time they left the factory to the moment they were administered. WHO established such a programme in partnership with UNICEF, and the two organizations work to ensure that only materials that have proven techni- 
cally satisfactory are supplied to countries. The "cold chain" has become the lifeline of the programme. Temperature-sensitive monitors alert immunization personnel when the shipment is being exposed to too much heat. Thanks to kerosene-driven refrigerators, the vaccines keep cool while in storage even where the electricity supply is unreliable. Portable ice-boxes enable health workers to carry the vaccines to the places they are needed, however remote. WHO has also developed a "universal" set of spare parts for refrigerator repair and has assembled a companion tool kit. Refrigerator maintenance and repair courses are organized for technicians in developing countries so that they learn to cope with problems on their own and keep the precious equipment in good working order.

Finally, through its moral leadership WHO has been instrumental in creating a global immunization coalition bringing together the efforts of United Nations bodies, bilateral aid agencies and private organizations. With self-reliance supplemented by generous support from this coalition, no committed country with a realistic immunization plan need be deterred by an initial lack of vaccines, cold chain equipment, or supplies.

In many ways, the Expanded Programme on Immunization fore- 
shadowed other programmes aimed at improving children's chances of survival which were soon to be launched by WHO and carried out in partnership with UNICEF. In 1978 immunization was also to be identified as an essential stepping-stone to "health for all by the year 2000", the goal set by WHO's membership at the start of the fourth decade.

**Family planning for family health**

WHO is not an agency with supra- 
national powers. It is an aggregate of sovereign member countries — which explains why in certain sensitive areas it began to act only when a clear consensus emerged from its member- 
ship.

Such an area is human reproduction. While support from WHO in family planning was requested very early on by some countries, it was not until 1965 that the entire membership gave the green light to a small programme for research into the biology of human reproduction and the medical aspects of fertility and sterility control.

The ambitious, successful "special programme" that grew out of this modest beginning still holds firmly to the principle, laid down in 1965, that it is not WHO's responsibility to endorse any particular population policy. At the same time, WHO does have a policy on family planning's link to family health. The data show conclusively 
that pregnancy in adolescent girls, lack
of proper spacing between births, and childbearing late in life place mother and child at risk of sickness and death.

The special programme is carried out in partnership with other United Nations agencies and funded mostly by voluntary contributions outside WHO's regular budget. It has a dual strategy. One is to strengthen research centres in the developing world by training their scientists, supplying equipment, providing consultants, etc., so that they become self-reliant in carrying out the research their countries need. More than a thousand scientists have received such training. As a result, research centres strengthened by the special programme have taken their rightful place in the worldwide network of centres that collaborate to improve existing methods of fertility regulation and to develop new and better ones.

This global "research and development" in contraception and sterility is the second strategy of the special programme. Research contracts awarded by the special programme to some 500 institutions in 65 countries have borne fruit over the years, and the findings have been described in over 6000 scientific publications. At the moment, several new methods are at various stages of development, including a monthly injectable contraceptive that WHO member countries are now introducing into their family planning programmes. The research coordinated by the special programme is not limited to laboratory and clinical work but looks at more efficient and acceptable ways of providing family planning services to people. For example, studies in the Philippines and Turkey have shown that trained nurse-midwives can insert and remove IUDs (intrauterine devices) just as well as doctors. Every bit as explosive in its way as the earlier discovery that tuberculosis patients could be cured at home as well as in hospital, this finding has vast potential for cost savings around the world.

Malaria: keeping an old enemy at bay

Malaria, the most prevalent of the tropical diseases, had been driven back during WHO's second decade through a combined onslaught of DDT against the carrier mosquitoes and the use of chloroquine, a synthetic quinine-type drug, against the malaria parasite itself. This onslaught was initially looked on as a drive to eradicate malaria from the earth—a race against time because scientists knew even then that the mosquitoes would eventually become resistant to DDT.

While many countries did achieve eradication, the original worldwide goal was not attained. In many countries the programmes, being costly, were cut back when eradication was close; in others, the mosquitoes became resistant far sooner than expected owing to the widespread use of DDT for pest control of agricultural crops; and in Africa the particular mosquito species carrying malaria proved to be vastly more efficient as a vector than most of its counterparts in other continents. The campaign nevertheless made an enormous contribution to world health at that time. By 1967, some 1000 million people living in areas that had originally been malarious were at little or no risk of the disease.
The antimalaria campaign conducted in WHO’s second decade relied heavily on spraying with insecticide, here being delivered in giant drums. Although it did not achieve worldwide eradication, it saved countless lives. In India alone, where a million lives a year were being claimed by malaria prior to the Second World War, the number of malaria deaths was reduced to almost zero by 1967.

Clearly, no single “magic bullet” could defeat malaria. Keeping such a complex disease under control called for an equally complex mix of tactics guided by an overall strategy that took account of the increasing resistance of the parasite to different antimalaria drugs and of the mosquito vector to different insecticides. As the world’s directing and coordinating authority in public health, WHO was the only organization able and willing to guide this giant effort. Through the reports of the WHO expert committee on malaria, which met regularly every few years, countries had access to the most up-to-date strategic thinking about malaria control. Through regional and global seminars, workshops and training courses organized by WHO, national personnel from the affected countries were able to bring their managerial and technical skills up to the level required for effective control programmes. Information made available by WHO about parasite and mosquito resistance enabled countries to select the right antimalaria drugs and insecticides. Advice to international travellers published once a year in WHO’s familiar yellow booklet (Vaccination Certificate Requirements and Health Advice for International Travel) spelled out the best protective measures for tourists and others to take beforehand and on the spot.

Stepping up the fight against tropical disease

Alongside the vital antimalaria activities described above, which continue to the present day, WHO’s member countries decided in 1974 to intensify an important dimension of the fight against malaria. By the mid-1970s it was becoming obvious that advances in the biomedical sciences were opening up radically new approaches to the control not only of malaria but of
the other major parasitic diseases such as schistosomiasis and African sleeping sickness, as well as leprosy. Research was the dimension that needed strengthening.

Thus began WHO's second "special programme", in partnership with the United Nations Development Programme (UNDP) and the World Bank. Like the pioneering programme in human reproduction, the special programme on tropical diseases had a dual goal: to promote and coordinate the development of new tools for the detection, treatment and prevention of the target diseases; and to strengthen the research capability of the countries where tropical diseases were rampant.

Once scientific curiosity about diseases like leprosy was stimulated in the industrialized countries, these hitherto neglected maladies began to command more attention — and more resources for study. At the same time, scientists from the affected countries were trained so that they could take part in the necessary research; during WHO's fourth decade, the number trained was over 600. As a result, the challenge of the killer diseases of the tropics has been taken up by the best minds from temperate and tropical countries alike. Among the many achievements:

**Leprosy.** Thanks to an effective combined drug regimen that is shorter in duration, and therefore more attractive to patients, than the one based on dapsone alone, patients are voluntarily reporting for treatment at the first signs of illness, before deformity appears. This increases their acceptance by the community. For the first time in the history of leprosy statistics, the number of registered cases is declining. For prevention, the world's first-ever vaccines against leprosy are currently being tested in Malawi and Venezuela.

**African sleeping sickness.** Sensitive diagnostic tests have been developed that are well adapted for field use. Now being tested is a new compound for treating the advanced stage of illness, nicknamed the "resurrection drug" because of the patients' spectacular recovery. Inexpensive, ingenious traps that are easy for villagers to use are reducing the number of tsetse flies spreading the disease.

**Malaria.** A simple new approach to determining the effectiveness of the antimalarials in use, and of testing the parasite's susceptibility to them, is enabling countries to continue relying on the older, cheaper compounds. Where there is no longer an effective response to these drugs, malaria programmes can now turn to a newly developed antimalarial — mefloquine. Other structurally novel antimalarials derived from the Chinese medicinal herb qinghaosu are giving promising results, and several malaria vaccines are at various stages of development.

**The right workers**

As recently as 15 years ago a diligent medical student in Africa might well have qualified as a doctor without taking an examination on malaria or sleeping sickness. In many tropical countries, "tropical medicine" was an optional postgraduate subject!

If people today find this hard to believe, it is a measure of the success of WHO's persistent advocacy of *locally appropriate health personnel*. This concept began making headway in the
The third decade: 1968-1978

mid-1960s, really took off in WHO’s third decade, and has now become central to the Organization’s work.

While the concept itself gradually won acceptance, the practical difficulties of implementing it have been enormous because few countries, whether industrialized or developing, have the “luxury” of starting from scratch. It takes an overhaul of the medical school curriculum — no easy task — to produce doctors who are skilled in dealing with local health problems and knowledgeable about local diseases. Even then, the question arises of the numbers of doctors trained and their distribution within the country. What, for example, does a country do when it has inherited the traditional doctor-based system but when its health professionals are few in number and clustered in the big cities? Are the vast majority of people to be left without health care of any kind? WHO’s response to this particular dilemma was not to offer a stock, ready-made solution. That would have run directly counter to the Organization’s advice: “Adapt, don’t adopt”. Instead, WHO actively encouraged research into various alternative solutions, among them the greater use of auxiliary health personnel, and it disseminated information on the innovations some countries were trying out, such as China’s “barefoot doctors” and the dayas, or traditional midwives, being trained in Sudan. Some of the Organization’s books on these subjects quickly became WHO classics and are still in constant demand — e.g., On Being in Charge, aimed at the supervisors of auxiliary personnel.

The wisdom of the ages

Modern drugs and medical practices can be credited with saving millions of lives. Yet the wisdom painstakingly accumulated over the ages, and handed down from generation to generation, is not without sense or reason. What WHO encourages is a critical assessment of traditional practices and a judicious combination of the best of the old and the new. Some examples:

• In traditional societies, women kneel, squat or stand when giving birth; in modern ones, they generally deliver lying on their backs. Medically speaking, an upright position makes more sense for it allows the pelvic bones to open wider and the uterus to contract more forcefully. On the other hand, pregnant women need a diet that is nutritious by modern standards rather than one that follows the ancient food taboos against eggs and meat, which grew out of women’s fear of a large baby and a difficult delivery.

• Plants have ever been the source of care and cure — but not all herbal remedies are effective or even harmless. Their testing is now being encouraged by WHO, while systematic data on the names, origin, composition and uses of thousands of medicinal plants have become available to all countries thanks to a computerized data bank developed by a WHO collaborating centre.

• Artificial substitutes for breast-milk, provided they are carefully prepared with clean water, can keep a baby going if need be. But breast-feeding provides more than just nutrients. It ensures automatic cleanliness. It protects the baby against infection, thanks to the antibodies the mother passes along in her milk. It promotes healthy spacing between births. “Breast is best” is a modern reaffirmation of the value of the most natural of practices.
Health as though people mattered

But mismatches between health workers and health needs were symptomatic of a more general malaise. By the mid-1970s dissatisfaction was building everywhere with static, fragmented ways of dealing with health. In the developing world, expensive city hospitals were absorbing an inordinate share of the national health budget while smaller health posts and clinics, both urban and rural, were scarce and starved of resources. Even countries that had made serious gains through separate programmes to combat malaria, leprosy and yaws, for example, were increasingly aware of the duplication and even competition inherent in such a fragmented set-up. At the same time, important health needs were not being catered to at all. Countless millions of people had no access to even rudimentary health services. Where local health posts did exist, the poorer people tended to turn up again and again with the same ailments — all for lack of attention to the root causes of their ill health, such as malnutrition caused by the growing of cash crops instead of staple foods. Nor was all well in the industrialized world, where for a host of historical reasons the health system had become top-heavy. Sophisticated hospital care had expanded faster than health-promoting and clinical services where people actually worked and lived. Virtually everywhere there were pockets of inadequate care, reflected in far higher rates of sickness and death. People were becoming passively dependent on the "medical miracle" to cure the effects of a lifetime of unhealthy living. Lung cancer, high blood pressure, heart disease and other diseases of affluence were costing ever more to patch up medically or surgically, yet people were not entirely happy with the impersonality of high-technology medicine.

In the same period WHO began to study and document the innovative, successful approaches to health that were being pioneered in some developing countries. The findings showed that while these alternative approaches were highly specific, they had certain key elements in common. One was an explicit commitment to universal coverage: bringing essential health care to not just some but all of the population, with special attention to those in greatest need. Another was the active involvement of individuals, families and communities in the drive for health and well-being. Instead of imposing standard health programmes on a passive population, health workers engaged in dialogue with the community to determine what health needs it perceived as being most urgent. When the surprising health gains made by especially poor countries were studied, it turned out that these were societies that encouraged schooling for both girls and boys, and where female autonomy was sufficient for mothers to act with some independence in caring for themselves and their children.

What these successful innovations pointed to was a new way of perceiving, promoting and protecting health. The time was ripe for an approach to health not only based on sound technology but centred on people and inspired by the values of universality and equity. By the start of WHO's fourth decade, this new value system had crystallized in the goal of "health for all".
The fourth decade: 1978-1988

"Health for all": a solemn commitment

WHO's fourth decade opened with a revolutionary decision that was intended to dominate its work until the turn of the century: its members undertook to make a giant effort to enable people everywhere to become healthy enough to lead socially and economically productive lives. This collective goal is known as "health for all by the year 2000". The emphasis is on equity — health for all — and on urgency, clearly conveyed by the deadline.

In adopting the goal of "health for all" countries did not mean that by the turn of the century all disease and disability would miraculously vanish. What they did mean becomes clearer when we look at the vehicle they chose to get them to the goal of health for all. The vehicle is primary health care: a blend of essential health services, personal responsibility for one's own health, and health-promoting action taken by the community.

It was at Alma-Ata, USSR, in September 1978 that WHO and UNICEF jointly convened an international conference to discuss primary health care, define its main components, and decide whether it was "poor man's medicine", as alleged by some, or a universally applicable concept. Unanimously, the health ministers and other delegates of 134 member countries signed the Declaration of Alma-Ata, leaving no doubt as to the universal value of primary health care — for poor nations and rich, for the health systems of countries with planned and with market economies alike. Everywhere, the eight essential components of primary health care were recognized to be indispensable (see below).

What is primary health care?

The Declaration of Alma-Ata specifies that primary health care must include at least the following eight components:

- education concerning prevailing health problems and the methods of preventing and controlling them;
- promotion of food supply and proper nutrition;
- an adequate supply of safe water and basic sanitation;
- maternal and child health care, including family planning;
- immunization against the major infectious diseases;
- prevention and control of locally endemic diseases;
- appropriate treatment of common diseases and injuries; and
- provision of essential drugs.

Equally important, services in all these areas are to be provided "to individuals and families in the community through their full participation . . . in the spirit of self-reliance and self-determination".
"Health for all by the year 2000" based on primary health care thus implies that:

- health will begin at home, in schools, in fields and factories rather than in clinics and hospitals;
- people will use better approaches for preventing disease and injury, instead of relying on doctors to repair damage that could have been avoided;
- communities will realize that they have the right and the responsibility to shape the environment so that it enhances health and reinforces individual action for health;
- resources for health will be equitably distributed, and essential health care will be accessible to everyone.

Countries on the move

In the space of one decade, enough has happened around the world to prove that "health for all by the year 2000" was no empty phrase but a powerful rallying cry to action. While the gains made are obviously not uniform from country to country, overall they are beyond the expectations of the Alma-Ata participants.

The industrialized countries were committed from the start to supporting the efforts of poorer countries towards "health for all". However, they initially questioned whether the goal was relevant to themselves. Remarkably, these affluent countries of North America, Europe and Asia have taken serious steps to build up a health-for-all
strategy that includes specific health targets and precise dates for reaching them.

In the developing world, "health for all" concepts and approaches have almost everywhere become official policy. In some places, health-for-all strategies are incorporated into the national economic plan; in others, inter-ministerial councils coordinate the solution of health problems that overlap different sectors of society; one country has even amended its constitution to make health care a right of citizenship. The transition from policy to practice has been constrained by a host of problems, ranging from massive national debt to natural disaster and managerial inexperience, but again the achievements are impressive. Some countries are spearheading local self-reliance by supporting a village-based approach to defining and meeting the basic minimum needs of life. Others have found the courage to make the politically difficult decision to allocate extra money to primary health care instead of funding an extra 500 beds in the main urban hospital.

Already, results are visible. Life expectancy has risen. The number of countries in which 2 or more of every 10 children die before the age of five has dropped by half since 1960. The jump in childhood immunization from 5% to 50% has already been mentioned. The following stories tell more about how WHO and its membership are carefully forging the building blocks of primary health care — the stepping-stones to "health for all".

**Essential medicines for all**

By the start of its fourth decade, WHO had begun a peaceful revolution that related directly to "health for all". Calling together a committee of WHO experts, it asked them which drug substances among the thousands marketed were really necessary for taking care of most health problems. The experts concluded that about 200 drugs and vaccines could be considered essential in good medical practice. Thus was born the first list of essential drugs.

WHO launched and promoted the concept of essential drugs in an effort to bring greater equity and rationality to this component of primary health care. Developing countries often had colossal drug bills — thousands of different preparations were typically available in a big city pharmacy, many of them imported from abroad with precious foreign exchange — yet great sections of the population had little or no access to modern medicines when they fell sick. At the same time, some of the available drugs were useless (e.g., a tonic instead of food for a malnourished child) while others, though individually useful, were marketed in medically irrational "cocktails".

The WHO model list of essential drugs, periodically updated to reflect modern therapeutic advances, now comprises about 250 essential drugs and vaccines — many of them no longer protected by patent rights and hence available at competitive prices. More than 100 governments have adapted the model list to their own requirements, often with WHO's technical support.
These countries, both developed and developing, are reaping the benefits that a carefully developed and executed drug policy can bring. It saves money, including foreign exchange. It reduces waste and confusion. Most important, it maximizes the number of people with real access to medicines. In the countryside, which has traditionally been the poor relation when it comes to medicines, a regular supply of drugs gives credibility to primary health care, increases client satisfaction, and boosts the morale of health personnel working under difficult conditions.

Health for all

Health has always been available for some; here is how WHO is trying to help widen the circle:

- Practically every country can boast of a sophisticated hospital in its capital city offering the best of modern medicine — or perhaps “boast” is not the right word. For these costly disease palaces, as they have been called, are serving only a fraction of those in need of emergency surgery, e.g., children needing an emergency appendicectomy and women in obstructed labour requiring a Caesarean section. To help bring basic surgery within reach of all, WHO is developing a series of handbooks emphasizing the practical training and equipment needed in small rural hospitals. Using simple but standard surgical techniques and the basic principles of asepsis and pain relief, such hospitals can save many lives at relatively little cost.

- WHO’s work on traditional midwives has demonstrated that “uneducated” people can make valuable contributions if they are given the training, the incentives and the confidence to do so. These traditional practitioners used to be ignored, maligned, even considered dangerous. As a result of WHO’s catalytic and promotional work, they are increasingly looked on as a great resource for bringing selected primary health care to all.

- Do bright children have a greater tendency to be short-sighted? Whatever the answer, many bright children today are failing to make the maximum use of the schooling they get — simply because they cannot see what is written on the blackboard. Developing countries cannot afford the loss of such a resource. With the support of WHO’s programme on low-cost glasses, they have started to bring better sight to all.

A bigger killer than cholera

Cholera has long been one of the most feared of diseases. Endemic in Asia, it has periodically swelled to epidemic proportions there and then spilled out into other corners of the globe, provoking panic and despair.

It took the efforts of the World Health Organization to alert the world to the fact that cholera, a diarrhoeal disease, was by no means the biggest such killer. In the poorer countries, four to five million children a year were falling
victim not to cholera but to other diarrhoeal diseases that they were expected to catch as a matter of course.

The root causes of these common diseases — dirty drinking-water, contaminated food, inadequate personal hygiene — were already being tackled by the Organization through its programmes on water, sanitation, food safety, and education for health. But those efforts would bear fruit only in the longer term. Something had to be done in the meantime to stop young diarrhoea victims from dying not only such an untimely death but a death of such indignity.

In 1978, WHO set up a diarrhoeal disease control programme focused on the immediate goal of reducing these deaths. At the time, medical science rightly recognized that diarrhoea victims were dying essentially from a loss of precious body fluids and salts. It was logical to reverse the dehydration by administering a sophisticated replacement fluid through an intravenous drip. Unfortunately, however, few lives were being saved by this treatment. Intravenous drips are expensive and can be set up only in a health centre or hospital, to which millions upon millions of families had no access at all.

WHO therefore promoted the idea of rehydrating the child with diarrhoea by means of a simple fluid given by mouth. Testing showed that the use of a fluid similar but not identical to that
used in intravenous drips can save the life of the vast majority of children with diarrhoea. Only extremely dehydrated children need a drip — but they never reach this critical stage if oral rehydration therapy is started early enough.

The effectiveness of oral rehydration therapy is matched by its simplicity and accessibility to even the poorest families. With advice from a health worker, a mother in her own home can give her child spoonfuls of life-saving fluid, which she makes by dissolving pre-mixed oral rehydration “salts” (essentially sodium, potassium and sugar) in water. Cheap though these pre-mixed packets are, researchers are busy testing the effectiveness of alternative approaches, such as the use of rice-water and similar ingredients that mothers may have more readily at hand. Families must also be reminded of the crucial importance of continuing to feed the child with diarrhoea: withholding food, however reasonable this seems for a “tired” stomach, has been proved scientifically to be extremely dangerous.

More than 100 countries have now launched programmes for diarrhoeal disease control in the framework of primary health care. By the latest WHO estimate, some 60% of the population of the developing countries now has access to packets of oral rehydration salts, and about one quarter of all diarrhoeal episodes are actually treated with oral rehydration. In the developed countries, a small but growing number of hospitals are making use of this simple, effective technology. Like the home treatment of tuberculosis, oral rehydration is an example of a therapy developed and tested in the Third World which has begun to benefit the industrialized world too.

This story has a surprise ending. Experience has now shown that villages with a properly organized programme for diarrhoeal disease control are protected against cholera as well. If it should strike, their death rate is likely to be 2% — as opposed to the 20-40% death rate seen in communities without training and supplies for oral rehydration.

Suffering averted

But for WHO . . .

- since 1975, four million African children born in areas previously infested with blackflies would have risked the slow progression to river blindness
- since 1977, at least twenty million people would have died of smallpox
- measles, neonatal tetanus and whooping cough would be killing over a million children a year
- in 1986 alone, three-quarters of a million children would have died from diarrhoea and dehydration
- in 1987, as many as 188 000 children would have been stricken with polio and run the risk of lifelong disablement
Antibiotics for children with cough and fever?

As childhood deaths from diarrhoea and the vaccine-preventable diseases dropped, respiratory infections climbed to the position of biggest or second biggest killer in many countries.

But WHO had not waited for this to happen before questioning the widespread indifference to the problem. The dilemma was how to recognize children with a potentially fatal infection from their clinical symptoms alone (X-rays are not usually available). Only thus could health workers treat them in time — while not burdening the health services or the national drug budget by giving needless antibiotics to children with a mild self-limiting illness.

Research promoted and coordinated by WHO opened the way to a solution. First, it was determined that bacterial pneumonia — easily cured with penicillin — was the major culprit in deaths from acute respiratory infection. Next, studies that correlated clinical symptoms with laboratory findings made it possible to draw up standard descriptions of the typical mild illness and the typical life-threatening infection, the latter with its tell-tale signs of chest retraction and rapid breathing.

Thanks to these standard clinical descriptions, even a village health worker with little formal training can recognize and treat the one case of bacterial pneumonia that occurs for every hundred children with mild respiratory illness. Parents, too, can learn when comforting the child is enough and when they need to seek professional help without delay.

Like oral rehydration therapy, this inexpensive but highly effective treatment can be carried out by non-medical personnel. And, as with oral rehydration, professional resistance is still limiting its application in some places. Where it is used, it has demonstrably and radically reduced the number of child deaths, as in India, Nepal, Pakistan, Papua New Guinea, and United Republic of Tanzania.

By the start of its fourth decade, WHO thus had a cluster of vigorous programmes aimed at improving child survival through primary health care and carried out in partnership with UNICEF. The millions of deaths from diarrhoeal and vaccine-preventable diseases were at long last beginning to decline (see box).

But the very success in bringing down the appalling rates of death in infants and children pointed up the shameful persistence of high mortality in their mothers.

Spotlight on a neglected tragedy

Every year, WHO estimates, at least half a million women die needlessly from causes related to pregnancy or childbirth. These are women in the prime of life whose death is not only untimely but leaves their children orphaned and far more vulnerable to sickness and death.

Ninety-nine percent of these deaths occur in the Third World. Each time she becomes pregnant, a woman from a poor developing country runs a 200-fold greater risk of dying than does...
The health, happiness and usefulness of this little girl when she grows up are in the balance right now. If, like her brothers, she gets enough nourishing food to eat and prompt care when she is ill, she will run a far smaller risk of bleeding to death in childbirth. If, like them, she is encouraged to go to school rather than mind the younger children, she will have a wider choice of options in life instead of having to rely on childbearing alone to prove her worth. Her children, in turn, will be less vulnerable to disease and death.

From the start of WHO’s campaign against maternal mortality, WHO experts and centres have been hard at work to determine the causes of these excess deaths and the possible solutions. The many deaths in very young and elderly mothers point up the critical need for family planning services so that unwanted pregnancies can be avoided. The countless deaths from illegal abortion carry the same message. Hypertension, controllable through prenatal care, takes its toll. Obstructed labour calls for quick transport to a clinic or hospital able to do Caesarean section; or, even better, it can often be prevented through a better diet starting in childhood so that the young woman’s pelvis develops normally. The fact that less than half of all deliveries in the Third World are attended by trained persons is reflected in the innumerable deaths from haemorrhage.

This complex web of causes illustrates how maternal health — indeed, anyone’s health — is not something that doctors and nurses can simply “deliver”. Health is a state reflecting the interplay of many factors: social, economic, and so on. That is why the Global Strategy for attaining health for all by the year 2000, adopted by member countries in 1981, talks not only about improved health services
but also about parallel, reinforcing changes in other spheres of life — agriculture, so that people have enough nourishing food to eat; the economy, to ensure that their income is adequate for their family’s needs; status and personal dignity, so that both women and men have genuine choices in life, parenthood being just one of them; education, which especially for girls and women has a much-needed reinforcing effect on their status and health — and the health of their children.

The value of WHO’s initiative for safe motherhood cannot yet be reckoned in numbers of deaths averted, although the World Bank and other important funding agencies have begun to support the necessary research and action, and the initiative itself is cosponsored by the United Nations Population Fund, with which WHO has long worked in partnership. Whatever reductions in maternal mortality may be achieved in the coming decade, they will without doubt owe much to the Organization’s moral leadership.

Rationalizing the X-ray

It cannot be overemphasized that the impetus for “health for all” stemmed from the irrationalities that prevailed in health care. The field of diagnostic imaging was no exception. On the one hand, the inhabitants of vast stretches of the developing world had no access whatever to X-ray machines, however simple. Elsewhere, in some of the industrialized countries, there was a degree of over-reliance on X-rays and other imaging systems (CT scanning, nuclear magnetic resonance imaging, etc.), which were absorbing up to ten percent of the entire national health budget.

WHO’s first priority was to spur the development of a basic X-ray machine that would require a minimum of maintenance even under harsh, climatic conditions, and that could bring good quality pictures at an affordable cost to previously unserved populations. Years of work culminated in the WHO Basic Radiological System (BRS), comprising the WHO-BRS X-ray machine and a set of three manuals, including one for the non-specialist doctor who will have to interpret the X-rays where there is no radiologist to call on. Hundreds of these machines, built according to WHO’s specifications by major manufacturers of X-ray equipment, are already proving their worth in Egypt, Sweden, Thailand and elsewhere.

The second priority was to bring together experts from around the world and challenge them to lay down precise guidelines for the rational use of diagnostic imaging. What kinds of diagnostic tests would be truly useful in the case of a child with a skull injury, for example, or a pregnant woman with abdominal pain? What kinds of X-ray and scanning apparatus would be cost-effective and suitable for, say, a small rural hospital? Thanks to the international consensus reached by WHO expert committees on these specific issues and many others, the Organization’s member countries are now in a position to contain spiralling radiology costs and protect their people against unnecessary radiation — without compromising diagnostic accuracy.
Cancer, the universal threat

Cancer, traditionally viewed as a disease of affluence, is in fact a universal threat. Half of the world’s cancer patients live in the developing countries, which will account for an increasing proportion of all cancer cases as the life expectancy of their population rises.

After decades of research, scientists have managed to unveil some of the secrets of cancer causation. As knowledge has accumulated, new approaches to prevention and cure have evolved — and WHO has seized on these discoveries and helped ensure their integration into national cancer control programmes. Enough knowledge now exists to prevent one-third of all cancers, to cure one-third (with early detection and adequate therapy), and to provide freedom from cancer pain.

Pain relief
Simple, inexpensive methods can control 80-90% of cancer pain. Such an approach has been tested and published by WHO, and has been welcomed by patients and their families, doctors and nurses. For patients whose cancer cannot be cured, effective pain relief at least allows them to die with dignity.

Screening and early treatment
Cervical cancer can be cured if it is caught in time through screening. More than three-quarters of the world’s cervical cancer patients live in the Third World, where the effectiveness of screening programmes can be markedly improved with a new strategy developed by WHO that focuses on specific target groups. Especially where resources are scarce, it is vital to detect this cancer at an early stage, when treatment is both affordable and effective.

Prevention through vaccination
People with hepatitis B infection run a greater risk of developing liver cancer later in life. For the first time, thanks to a vaccine against hepatitis B, there is a prospect of preventing a common tumour through vaccination. Primary cancer of the liver is one of the ten most common cancers worldwide and is especially prevalent in developing countries.

But prevention through vaccination is the exception, not the rule. Lung cancer is one of the world’s greatest killers — and 90% of cases are due to tobacco consumption, which is why WHO is helping to put the issue of tobacco use high on the agenda of governments. Cancer of the lung is the perfect example of a tumour that is unnecessary, self-induced, avoidable — in other words, preventable through individual action.

Individual action . . . bolstered by community support
A sense of personal responsibility for one’s health is a vital component of primary health care. Always important, individual decisions concerning diet, tobacco, exercise, and alcohol and drug consumption have assumed greater importance than ever for several reasons. One reason is the
The fourth decade: 1978-1988

Urban slums are breeding-grounds for physical disease and social ills, ranging from tuberculosis to drug abuse, that the health sector can do no more than alleviate. No matter how hard health workers strive to bring care to people everywhere, "health for all" will not be attained without equally serious efforts on the part of all sectors: housing, industry, education, agriculture.

prohibitive cost of "repairs" in the industrialized countries: hearts, livers, arteries cost infinitely more to transplant or restore surgically than to keep healthy in the first place. In other words, the medical miracle has begun to yield diminishing returns in relation to its cost. In the developing countries, advertising and other pressures to adopt unhealthy life-styles are contributing to the rising incidence of cardiovascular disease, cancer and alcohol abuse. This doubles the burden on their health budgets, already stretched to breaking point. While still struggling to control the diseases that stem from poverty, the developing countries must contend with the new ones of affluence.

The single biggest preventable cause of premature death and disability in the world is tobacco consumption, responsible for millions of deaths a year from heart disease, stroke, lung cancer, and cancer of the mouth. An unhealthy diet and lack of physical exercise are contributing factors in many cancers and cardiovascular diseases. Alcohol consumption, in addition to causing disease and death in those who overindulge, contributes directly to the epidemic of road traffic accidents and violence sweeping the world. Drug abuse has disastrous individual and social repercussions, now magnified by the spread of the AIDS virus through intravenous drug use.
The factor common to all of the above ills is human behaviour. To promote healthier life-styles, the Organization collects data on disease and death by cause and analyses global trends; provides validated information that governments, private organizations, health professionals and communities can use in advocating individual action for health; encourages and coordinates research into better approaches to motivating people to stay healthy.

But it is one thing to ask people to stay healthy by exercising, driving responsibly, eating a healthy diet, and refraining from the use of tobacco. It is quite another to provide them with realistic ways of doing so. WHO thus campaigns for community initiatives in all these areas that will lend support to individual action for health. The Organization acts as a clearing-house for information on the achievements of local communities and national governments in creating health-promoting environments, for example, by providing recreation areas where city dwellers can get outdoor exercise, by organizing courses on road safety for teenagers, by treating non-smoking as the socially acceptable norm. The vital role of legislation, education, and sound policies in all sectors of society — not just the health sector — is explicitly recognized in the Global Strategy for achieving health for all. The aim is a society that makes it easier for the individual to make healthy choices.

A worldwide effort to stop AIDS

WHO's painstaking accumulation of expertise among its staff and collaborators, its cordial relationships with scientists and health officials around the world, its moral and technical authority, mean that when a new health threat arises the Organization has what it takes to mount an effective response.

AIDS is a case in point. Combating this worldwide epidemic calls for a worldwide effort, for which WHO's directing and coordinating role has been officially endorsed by governments everywhere. Within one year of the formal launching of the Global Programme on AIDS, 115 countries — including 44 in Africa, 27 in the Middle East, Asia and Oceania, 38 in the Americas and 6 in Europe — had already benefited from WHO's collaboration in starting, supporting and strengthening their national AIDS programmes. At the request of these governments, WHO has provided staff and organized training workshops in the latest AIDS laboratory techniques.

To encourage strong international leadership, the Organization has convened vital inter-country meetings that have marked distinct turning-points in national and regional awareness and action. In collaboration with world-renowned scientists, WHO has: organized a global bank for AIDS viruses; issued guidelines on subjects such as AIDS and international travel, AIDS control in prisons, and stringent disinfection methods; laid down standards for screening programmes; and begun coordinating global strategies for the testing of vaccines.
as soon as they are ready for clinical trial — although this prospect is still years away. In collaboration with others, WHO is determining the economic and demographic impact of the disease and is designing models to help predict the future course of the epidemic.

AIDS is more than a disease; it is a threat to socioeconomic development and stability to the extent that it threatens men and women in the most productive phase of their lives and lets loose the demons of fear, ignorance and intolerance. This is the social impact of the epidemic, which is as much a part of the pathology of AIDS as the virus itself. WHO, in addition to tackling the technical aspects of disease control, is sparing no effort to spread the message that this social pathology can and must be minimized if we are to stem the epidemic (see below).

Transmitted by sexual intercourse, blood transfusion, needle-sharing, and from mother to unborn child, the virus that causes AIDS can be spread — or stopped — by uniquely human acts. With its years of experience in advocating personal responsibility, WHO can give invaluable support in the global campaign to convince people that their individual actions are choices for life or death.

Tolerance will make the difference between success and failure

Persons infected with the virus that causes AIDS should, and must, remain in society, for at least two reasons. The first is that, except for unprotected sex, blood transfusions and needle-sharing — all of which can be prevented — these people are simply not dangerous to others. The second reason is that threatening infected persons with exclusion — or worse — will drive the problem “underground”, wreaking havoc with educational efforts and testing strategies. Therefore, how societies treat such persons will not only reflect fundamental values, but will probably make the difference between success and failure of AIDS control strategies at the national level. To the extent that we exclude infected persons from society, we endanger society; while to the extent that we maintain infected persons within society, we protect society. This is WHO’s message of realism and of tolerance.
The Future

While the AIDS epidemic casts its shadow over the years remaining until the turn of the century and beyond, the world now has the technical knowledge, the social tools and the political will to dominate the disease — provided that it stands united, as it did to conquer smallpox.

The same is true of most of the other ills that afflict humanity. Under WHO's banner, countries have made tremendous strides during the past four decades. Life expectancy in the developing countries was but 41.4 years in the early 1950s; by the early 1980s, it had risen to over 57 years. Similarly, infant mortality — the number of babies dying during their first year of life — has fallen from 180 to 88 per thousand births. But the achievements are dwarfed by the needs that are still unmet. More people than ever are trapped in absolute poverty. The number of illiterate women in the Third World has never been greater, and the literacy gap between men and women is widening, not narrowing. In an alarming number of countries, population growth is fast outstripping the carrying capacity of the land, including food and energy resources. With the unprecedented growth of cities in poor and rich countries alike, demographers predict that almost half of humanity will be living in urban centres by the year 2000. Fundamental changes are also expected in the age distribution of the population, with both young people and the elderly becoming more dominant than ever.

These formidable challenges can be met only if the world stands united and

Adding life to years, not just extra years to life, is WHO's message for a world in which the elderly are a growing proportion of the population. To help ward off the ailments of old age, prevention has to start early, including a healthy diet and regular physical and mental activity. But to keep old people integrated into the mainstream of life, society has to adapt too — for example, by making sure that traffic lights stay green long enough for a frail person to cross the street.
lends technical, moral and material reinforcement to the efforts of individual countries. As in the past, WHO's support can be counted on to take many forms. The Organization is coordinating research in various biomedical and sociocultural areas that can be expected to yield a rich crop of breakthroughs. Some developments already in the pipeline include vaccines against common respiratory illnesses, encephalitis, hepatitis, and certain bacterial diseases; even a contraceptive vaccine has reached the stage of clinical trials.

Direct support to individual member countries, a mainstay of the Organization's work since 1948, will continue to help in reorienting health work along the lines of the Global Strategy for health for all. WHO's moral authority will be available, as always, for health ministers and officials to draw on as they come to grips with issues at the interface between health and society — the control of AIDS, the fight against tobacco addiction, the elimination of barriers to good health rooted in racial or gender discrimination.

Just as important is WHO's role as an "honest broker" matching needs with resources: while the Organization's own budget is very limited, its effect is multiplied several-fold through the solidarity it appeals to in the donor community. Through international financing agencies, individual donors, nongovernmental groups and national governments, whose awareness of health as an indispensable lever for socioeconomic development has been stimulated by WHO, developing countries genuinely committed to "health for all" are finding support for their work in all areas, ranging from sanitation to childhood immunization, from the provision of essential drugs to the control of AIDS.

Will "health for all" be achieved? It is too soon to say for sure. Many greeted the announcement of the goal with incredulity. But smallpox eradication, too, now looked on as a shining example of what people can achieve if they are motivated and united, was dismissed by many sceptics as an impossible, if wonderful, dream. Gradually, as the intermediate goals of the smallpox eradication campaign were reached one by one, the doubters stopped scoffing and started helping.

Those who doubt the feasibility of "health for all" would do well to notice that some of the intermediate stepping-stones are being reached. Of WHO's 166 member countries, 146 took the goal seriously enough in 1985 to make a formal evaluation of their progress thus far. In many places in the developing world, persistent efforts are bringing primary health care to more and more of the people, as shown by the falling death rates from childhood diseases. In the industrialized world, too, governments and people are rising to the challenge. They are beginning to examine with great seriousness how to reform their top-heavy health systems; they are devoting more effort to informing their citizens how to stay healthy, instead of just offering expensive cures for disease. The idea of setting target dates has caught on, as witness the recently set goals of "no drunk driving by 1990" in Europe and the push to eliminate polio from the Americas by the same date.
Four decades of achievement

If “health for all” is reached, it is fair to say that it will be due in no small measure to the remarkable solidarity which has up to now prevailed between WHO’s member countries, regardless of their size or economic strength or ideological outlook. For this, the world owes much to the farsighted decision taken back in 1947 to create a separate health organization sheltered from the political winds that would inevitably buffet the United Nations itself.

To judge from its past performance, WHO will continue to offer its membership invaluable benefits in the twenty-first century as new health challenges arise. New diseases have cropped up in the last twenty years — Marburg disease, Ebola fever, Legionnaire’s disease, and now AIDS. New problems are constantly arising, such as the paradox of thousands of doctors being turned out by medical schools in countries whose health services are unable to absorb the cost of hiring them. On the positive side, new partnerships are being forged so that the achievement of “health for all” need not rest on governmental shoulders alone but can draw on the creative energy and resources of the people themselves in their myriad groupings, whether social, religious, charitable or political. New channels are being opened up to health, which, as the WHO Constitution reminds us, comprises not only a physical but also a mental dimension. Whether called mental or spiritual or simply the uniquely human ability to look inward, this is the dimension that manifests itself in phenomena as diverse as meditation to control blood pressure, human solidarity between rich and poor, and motivation — that intangible, indispensable ingredient of every successful human venture. WHO’s Constitution explicitly calls on the

A world without WHO . . .

The value of the World Health Organization can be judged by looking at its achievements over the past four decades — and by imagining what the world would look like today if WHO had never been born. In a world without WHO . . .

. . . there would be no global forum for reaching consensus on the sensitive health and human rights issues raised by the AIDS epidemic

. . . there would be no independent “honest broker” to match the funding needs of developing countries in the field of health with the resources potentially available from financing agencies and donor countries

. . . national health officials would not be able to count on global moral support in their battle against tobacco addiction

. . . there would be no politically neutral body to monitor the health effects of radiation fallout after nuclear accidents

. . . there would be no unifying moral and technical force to galvanize, guide and support countries in achieving health for all by the year 2000
Organization to use its influence in promoting mental health and harmonizing human relationships. The health of the individual cannot be imagined without the life of the mind, nor can the health of social groups exist in the absence of mutual tolerance and solidarity. These facts have never been more important than in our nuclear age.

Since 1948 the history of WHO has been one of adaptation to evolving circumstances, with the Organization changing gears to give priority now to one health problem, now another. This adaptability has not diminished with age. In the Organization’s fortieth year, the AIDS programme tripled its staff even as the smallpox unit was shut down, its work done. WHO’s member countries can rely on their organization to maintain its youthful flexibility in the next four decades and beyond, whatever the nature of the challenges awaiting us.
World Health Organization
Publications

Information that builds a better world

Reliable information is the cornerstone for building the awareness, expertise, and practical strategies necessary to improve the world at its heart: the health — physical, mental, and social — of humanity.

For 40 years, the development of reliable information has been one of the functions of the World Health Organization. Charged to act as the world’s directing and coordinating authority on questions of human health, WHO has developed a host of networks and mechanisms for generating data, applying facts to problems, and recommending solutions that will lead to sustained improvements in health.

Much of the information developed by WHO is made available to the world through an extensive programme of publications, now numbering 7 periodicals and close to 80 new books each year. Some are practical manuals for use in preventing and controlling disease or developing quality health care. Others are unique guides to internationally accepted procedures, standards, or practice, introducing uniformity to world medical care. Still others attack urgent technical problems with advice formulated and agreed upon by international groups of experts.

Closely tied to the work of WHO, each of these publications articulates part of a global plan, conveying information that can push the world forward through the protection and promotion of health.
World Health Organization Periodicals

The global view

Bulletin of the World Health Organization
One of the world’s most respected sources of original research findings in the biomedical sciences. The journal also demonstrates the capacity of WHO to bring world research and technical expertise to bear on some of the most pressing problems of medicine and public health.
Bimonthly

International Digest of Health Legislation
The only periodical that allows readers to follow worldwide developments in laws and regulations designed to protect public health and the human environment. In recent years, the Digest has also become a key reference to new AIDS legislation enacted throughout the world.
Quarterly

WHO Drug Information
Communicates drug information that is either developed and issued by WHO or transmitted to WHO by research and regulatory authorities throughout the world. Information developed by WHO includes newly proposed and recommended International Nonproprietary Names (INN) for Pharmaceutical Substances and changes in the Model List of Essential Drugs.
Quarterly

Weekly Epidemiological Record
An essential instrument for the collation and dissemination of epidemiological data useful in disease surveillance and control on a global level. Information on AIDS includes regular updates on the global number of cases, groups at risk, modes of transmission, preventive measures, risks to travellers, and prospects for vaccine development.
Weekly

World Health Statistics Quarterly
Provides health guidance based on what can be learned when statistical data, drawn from global sources and available over time, are submitted to appropriate analysis. Each quarterly issue focuses on a selected theme or topic in order to give a single disease or health problem the full benefit of analysis using several different approaches.
Quarterly

World Health Forum
A quarterly record of ideas, arguments, and experiences contributed by health professionals the world over. Individual issues, which may feature as many as 30 different communications, offer practical lessons that can bring the processes of health thinking and planning closer to real conditions in the field.
Quarterly

World Health
A popular magazine illustrating the human side of efforts to improve world health. Global in its scope, the magazine also encourages readers to be more conscious of the role that good health plays both in their own lives and at the community level in different parts of the world.
10 issues per year

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WHO Addresses

**Headquarters**
World Health Organization  
CH-1211 Geneva 27,  
Switzerland  
Telephone: 91 21 11  
Telex: UNISANTE GENEVE 27821  
Fax: (022) 91 07 46

**Africa**
WHO, Regional Office for Africa  
P.O. Box 6, Brazzaville  
Congo  
Telephone: 81 38 60 to 83 38 65  
Telex: UNISANTE BRAZZAVILLE 5217 or 5364

**Americas**
WHO, Regional Office for the Americas  
Pan American Sanitary Bureau  
525 23rd Street, N.W.  
Washington, D.C. 20037  
United States of America  
Telephone: 861-3200  
Telex: OFSANPAN WASHINGTON 248338  
Fax: (202) 223.59.71

**Eastern Mediterranean**
WHO, Regional Office for the Eastern Mediterranean  
P.O. Box 1517, Alexandria - 21511  
Egypt  
Telephone: 48-300 90, 48-300 96/97  
Telex: UNISANTE ALEXANDRIA 54028 or 54684  
Fax: 4838916

**Europe**
WHO, Regional Office for Europe  
8, Scherfigsvej, DK-2100 Copenhagen Ø  
Denmark  
Telephone: 29 01 11  
Telex: UNISANTE COPENHAGEN 15348  
Fax: (451) 18.11.20

**South-East Asia**
WHO, Regional Office for South-East Asia  
World Health House, Indraprastha Estate  
Mahatma Gandhi Road, New Delhi -110002  
India  
Telephone: 331 7804 to 331 7823  
Telex: WHO NEW DELHI 3165095  
Fax: (91) 331 8607

**Western Pacific**
WHO, Regional Office for the Western Pacific  
P.O. Box 2932, 1099 Manila  
Philippines  
Telephone: 521-84-21  
Telex: UNISANTE MANILA 27652  
Fax: 632/52 11 036

**International Agency for Research on Cancer**
150, Cours Albert-Thomas  
F-69372 Lyon Cédex 08  
France  
Telephone: 72.73.84.85  
Telex: UNICANCER LYON 380023  
Fax: 72 738 575
WHO is the organization whose "neutral umbrella" makes it politically possible for countries of differing economic status and ideological outlook to combat together the scourges of humanity. An example is smallpox, whose eradication has saved millions of lives and done away with the enormous financial burden of vaccination and surveillance.

WHO brings together the best scientific minds from temperate and tropical countries alike to face the challenge of the killer diseases of the tropics.

WHO is the organization that has helped develop the "cold chain" and other basic underpinnings of universal childhood immunization; the organization that has promoted the use of oral rehydration therapy to prevent not only the few well-publicized deaths from cholera but the countless humble deaths from ordinary diarrhoeal diseases.

WHO convenes meetings of scientists and health experts from all corners of the world, distils precious guidance on disease control from their deliberations, and makes this guidance available to all member countries through its publications.

WHO is the organization that has developed the Basic Radiological System and the essential drugs concept, which are proving to be of benefit in rationalizing health expenditure in rich as well as poor countries.

WHO is the organization capable of inspiring enough confidence in its member countries for them to face and fight the AIDS epidemic in a spirit of frankness and trust.