Introduction

Chapter 1 showed that for most of the world's population every step in life, from infancy to old age, is taken under the twin shadows of poverty and inequity, with health care providers facing enormous problems in fighting disease and ensuring equal access to care - in other words in bridging the gaps in global health. The review also showed that people's health status can be improved, albeit gradually. The present chapter provides an overview of the many activities undertaken by WHO - in 1994 alone - to support countries in the improvement of health care. They range from the establishment of international norms and standards for biological substances, vaccines and pharmaceuticals to direct support in health emergencies. WHO's activities are governed broadly by its constitution that sets the attainment by all peoples of the highest possible level of health as the ultimate objective of the Organization and its Member States. WHO is a goal-oriented organization working to meet clearly defined objectives. These and related plans of action are determined by general programmes of work outlining for each six-year period a global health policy framework as well as a framework for WHO's action (the current eighth programme covers the period 1990-1995). Other detailed guidance is provided by four interrelated policy orientations agreed for WHO's work during the current 1994-1995 biennium: integrating health and human development in public policies; ensuring equitable access to health services; promoting and protecting health; and preventing and controlling specific health problems. At the same time priorities have been set for each programme in the light of the results expected from WHO's two main functions of technical cooperation with countries and coordination of international health work. These are complementary and together include: advocacy of measures to improve health; stimulating and mobilizing specific health action and disseminating information; developing norms and standards, plans and policies; training; research promotion; direct technical consultation; and resource mobilization. The full extent of WHO's work cannot be fully reflected in this report, but examples are given of the different types of action. Regional highlights are also presented.

Child health

WHO's work helps to save the lives of several million children every year. Through its global strategy for health for all by the year 2000, WHO promotes a coherent, integrated approach to all aspects of child care including childbirth. It gives priority to achieving the 1992 World Summit for Children target of reducing, by the year 2000, mortality in children under age 5 to a maximum of 70 per 1,000 live births through:

- immunization of at least 90% of women and children aged under 1 year against childhood target diseases (diphtheria, pertussis, tetanus, measles, poliomyelitis, tuberculosis) eradication of poliomyelitis by the year 2000
- reduction of measles cases by 90% and measles deaths by 95% by the year 1995
- elimination of neonatal tetanus by the year 1995

* The age groupings used for the purpose of this report are: children, including infants (under 5 years); school-age children and adolescents (5-19 years); adults (20-64 years); and the elderly (65 years or more). Where information cannot be assigned to one of these categories, it is given under General Health Issues.
- reduction in the annual number of cases of diarrhoea incidence by 25% and diarrhoea deaths by 50% in children under age 5
- a one-third reduction in mortality from acute respiratory infections in children under age 5
- virtual elimination of vitamin A deficiency and its consequences including blindness
- reduction in the number of children with low birth weight.

WHO estimates that immunization saved approximately 3 million people from dying from measles, neonatal tetanus, pertussis and poliomyelitis in 1993. However, some 2.1 million deaths still occur annually from the first three diseases as well as 114,000 cases of poliomyelitis. In a number of countries yellow fever and hepatitis B vaccine were added to the immunization schedule. In response to worldwide concern over injection practices, autoinjector syringes became more widely used for immunizations. The multi-vaccine jet injector that allows vaccines from different vials to be combined at the time of injection is at an early stage of development, while testing of time-temperature indicators for immunization was completed. In Africa a follow-up study of children immunized against hepatitis B was carried out in connection with research on the role of the virus in liver cancer.

The 1995 goal of neonatal tetanus elimination has already been attained by many countries and will ultimately be reached by many more.

The 1995 goal of diphtheria epidemic in the Russian Federation and Ukraine, WHO worked closely with Member States to assure prompt investigation and reporting. A plan of action for diphtheria control in the European region was completed. Guidelines for case investigation, treatment of suspect cases and laboratory testing were prepared. WHO has also worked with donors to ensure that necessary supplies of vaccines, antitoxin and antibiotics are made available. A European task force on diphtheria control was set up at the WHO Regional Office in Copenhagen, in order to accelerate progress in controlling the epidemic in eastern Europe and to reduce the danger of its spread.

In 1993 progress towards the poliomyelitis eradication goal was heartening. No cases were reported from the western hemisphere. In the Americas eradication has been pursued through a concerted effort by national governments and a consortium of donor agencies. Countries in Africa and the Eastern Mediterranean are now recording zero or low incidence. Globally, however, the steady decline in incidence from 1988 did not continue in 1992, when the reported rate rose by 6% compared to the previous year, primarily owing to an increase in South-East Asia. Efforts are being made to develop a more heat-stable poliovirus vaccine that can be delivered with a less rigorously maintained cold chain. Large donations for poliomyelitis eradication were coordinated with Rotary International, the United States Centers for Disease Control and Prevention, USAID, AIDAB and JICA.

Measles immunization coverage reached a peak of 80% in 1990; since then it has declined slightly and is currently only 78%. This has largely been due to a falling-off in international interest and support following achievement of the 1990 target of 80% immunization of children under 1 year, and disruption to services as a result of war and civil strife. The number of reported cases has continued to decrease. The goal of reducing measles mortality by 95% can be reached by 1995; but the goal of reducing incidence by 90% in every community will not be achieved.

In 1994 the region of the Americas committed itself to eliminating measles by the year 2000. Country after country has embarked on a campaign to interrupt transmission of the disease, and incidence is now at the lowest level ever. If the momentum is sustained the
Americas may well lead the way towards global elimination of this major killer of children.

WHO encourages self-reliance of countries in conducting immunization through basic health services. It cooperates with UNICEF in its initiative of supplying over 100 countries with vaccine worth over $65 million a year, representing 40% of the total global production. Major priorities are to at least sustain the accomplishments of previous years and to continue to strive for achievement of the 1992 World Summit for Children goal of immuniza-
tion against the six vaccine-preventable diseases.

Recent years have seen increasing demands for WHO support for national programmes to control diarrheal diseases in children. By the end of 1994 virtually all developing countries had implemented plans of action. Nearly 42% of health staff in the countries had been trained in supervisory skills using training materials developed by WHO, and almost 30% of doctors and other health workers had been trained in diarrhoea case management, many of them in the more than 420 diarrhoea training units established in over 90 countries. It is estimated that nearly 85% of the population of the countries had access to oral rehydration salts at the end of 1994. Surveys indicated that 88% of mothers were aware of the need for continued feeding for children with diarrhoea and 77% of the need for increased fluids.

In close coordination with UNICEF, WHO has developed an integrated clinical approach to managing the main diseases of children: acute respiratory infections, diarrhoea, measles, malaria and other febrile conditions, malnutrition and anemia. Within WHO, 10 programmes and units are participating in this initiative. The different guidelines in this field have been consolidated into four treatment charts. A training course on use of the charts was developed and pretested in Ethiopia, and a revised version will be field-tested in the course of 1995.

The last few years have seen a fairly rapid increase in the proportion of children having access to standard care management for acute respiratory infections, particularly pneumonia. By the end of 1994, 59 of the 88 target countries with high infant mortality rates had operational control programmes, and activities were in progress in districts where over 25% of children are at risk. WHO supports countries in formulating policies, planning programmes, implementing training and communications strategies and conducting evaluation surveys.

Particular emphasis is given to training in the management of acute respiratory infections. WHO supports courses for workers in first-level health facilities and referral hospitals on standard case management and distributes training and technical materials. Minimum requirements for monitoring the quality of training were established. More than 190,000 health managers, doctors, nurses and community health workers in over 60 countries have been trained so far.

WHO is involved in numerous studies on acute respiratory infections in Africa, Asia and Latin America. These include research on pneumonia in infants, including the effects of indoor air pollution; studies on the safety and efficacy of vitamin A supplementation in young infants to prevent diarrhoea and pneumonia; and field or clinical trials of vaccines against cholera, dysentery and respiratory infections. Other studies deal with the effectiveness of various antibiotic drugs in the treatment of acute respiratory infections in infants and malnourished children.

Technical and financial support for nutrition activities was provided to 62 countries, mostly in collaboration with FAO and UNICEF. A global database on child growth was established, and indicators and procedures for monitoring the prevalence of iodine, iron and vitamin A deficiencies were published in cooperation with UNICEF. WHO also issued a major report describing the effects of poverty on nutrition, on the basis of a collaborative study with the International Food Policy Research Institute (USA).
About 200 million children under age 5 are affected by protein-energy malnutrition; and some 36% of children in the developing world are underweight. Since 1993 WHO’s efforts to improve infant and young child nutrition have focused on promoting breast-feeding. It has been calculated that breast-feeding could prevent the deaths of at least 1 million children a year. A new “baby-friendly hospital initiative”, created and promoted by WHO and UNICEF, has proved highly successful in encouraging proper infant feeding practices, starting at birth. In Africa alone, where problems of infant malnutrition are especially acute, two-thirds of the countries have already implemented this simple, yet effective concept. Continued technical and financial support will be made available to more than 90 countries to give effect to the International Code of Marketing of Breast-Milk Substitutes. A workshop on supplementary feeding for children was held for African and Eastern Mediterranean countries.

In South-East Asia WHO collaborates with governments in establishing national nutrition policies and strategies and implementing programmes, with emphasis on common nutritional deficiency disorders. A South-East Asian regional nutrition network was set up and should lead to improved weaning, anaemia control and prevention of vitamin A deficiency and to the creation of national expertise in behavioural research. Iodization of salt to control iodine deficiency disorders has been promoted in Africa since 1987. Many countries now have a formal policy for this measure and seven have reached the objective of universal iodization.

Health of school-age children and adolescents

Increasing attention is being paid to the health of adolescents throughout the world in recognition of the impact of a rapidly changing world on their behaviour and the importance of this period of life in setting patterns which have lifelong implications. WHO supports activities focusing on adolescents in the areas of nutrition, mental health, sexuality and reproductive health including equity between the sexes, non-communicable and communicable diseases, health education, injury prevention and use of tobacco, alcohol and other drugs.

A joint UNICEF/WHO/UNFPA policy statement on the reproductive health of adolescents has been disseminated. WHO supported the formulation of adolescent health policies in more than 20 countries, and cooperated closely with many NGOs in promoting adolescent health. In 20 countries projects on street children were implemented jointly with the International Organization of Good Templars. Training and other materials were developed and widely distributed in collaboration with USAID, UNESCO, the Sasakawa Foundation and the Commonwealth Youth Programme in South-East Asia. Adolescent health programmes are being carried out in Indonesia, Myanmar and Sri Lanka.

A regional plan of action on health and violence for the Americas has been formulated, which enshrines the principles of comprehensiveness, equity, political commitment, civic culture and knowledge as a basis for action and community participation. It seeks to prevent violence, diminish its effects on vulnerable groups and set up adequate care for victims.

WHO is re-evaluating the role of HIV/AIDS counselling and supports research on male-female relations in four countries, on risk-related sexual behaviour among young people in seven countries, and on household and community responses to HIV/AIDS in five countries. Member States in Africa are given technical support on preventing HIV infection in young people through health education, behaviour counselling, promotion of condom use and encouragement of a healthy lifestyle. Governments are being urged to include education on HIV/AIDS and sexually transmitted diseases in the school curriculum, and WHO worked with the
Young People’s Christian Association and IFRC on peer education projects on HIV/AIDS among out-of-school youth in three countries.

A multicentre study was started in three countries to explore areas of conflict between adolescents and adults which undermine healthy behaviour. A number of studies were supported in such fields as the capacity of health services to respond to adolescents’ needs, the impact of deworming on the nutritional status of schoolchildren and comparisons of the effectiveness of albendazole and mebendazole in reducing intestinal wormload. Materials were produced in such areas as training of health professionals in adolescent health, and health facts for youth.

**Communicable diseases**

In face of the mounting threat of tuberculosis WHO is seeking to mobilize major support from the public and private sectors, and a special account for tuberculosis was established within the Organization’s Voluntary Fund for Health Promotion. Programmes were reorganized in a number of countries, and projects launched with financial support from the World Bank and ODA. Standardized short-course chemotherapy for tuberculosis is starting to be introduced in most countries of South-East Asia according to WHO guidelines. In India, a revised national plan was drawn up which will accord higher priority and greater resources to tuberculosis control, including financing by the World Bank. A similar outcome is expected from reviews carried out in Indonesia and Nepal. WHO is the implementing agency for tuberculosis and leprosy control under the World Bank’s fourth population and health project in Bangladesh.

Research activities have produced some important results which might have profound implications for policy. A study of rifampicin suggests that it is a promising new drug. Another new drug, spiramycin, whose initial assessment in tuberculosis control was supported by WHO, will be tested in a large trial of multidrug-resistant tuberculosis. Epidemiological studies have demonstrated the important interaction between HIV and tuberculosis. A study in Uganda of the feasibility of tuberculosis chemoprophylaxis for HIV-infected persons suggests that this intervention is not easily transferable on a large scale in a developing country setting. A study in India, partly funded by ODA, is assessing ways of involving private practitioners more effectively in tuberculosis control.

First medium-term plans were formulated for 129 national HIV/AIDS programmes, and second-generation plans for 70. Sexually transmitted diseases and HIV/AIDS programmes have been integrated in most African countries, some 80 developing countries are

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**WHO has evaluated the health risks posed by exposure to close to 200 industrial chemicals and other substances.**
supported in the implementation of sentinel HIV surveillance, and a new bulk purchase agreement for HIV test kits for developing countries was concluded. Approximately 60 million condoms were ordered for developing countries at reduced unit cost. Senior managers and other staff from 80 countries were trained in HIV/AIDS programme management, and distance learning material on blood safety for blood transfusion service staff was published. High priority was given to AIDS prevention in South-East Asia, where national AIDS committees were established, education and information of health workers and the general population started, and laboratory facilities strengthened for screening of blood for HIV.

A WHO-endorsed phase I (safety) trial of an HIV candidate vaccine took place for the first time in a developing country. WHO has characterized HIV strains in about 80 blood specimens from evaluation sites and made them available to scientists and manufacturers. Vaccine testing sites were strengthened in four developing countries. An epidemiological model of mature sexually transmitted HIV epidemics in central and eastern Africa is being validated, and a major research project in western Africa including prostitutes and their clients supported. A method for evaluating the effectiveness of HIV prevention was developed in collaboration with USAID and distributed worldwide.

Guidance on HIV testing is being issued, and a policy developed on restrictions for HIV-positive travellers including migrants and refugees. During the Rwanda emergency guidelines were disseminated on reducing HIV transmission in emergency situations, including a list of essential supplies for blood transfusion. Support is being given to several countries to develop a comprehensive blood safety policy in order to reduce blood transmission of various infections including HIV/AIDS. WHO works in partnership with hundreds of NGOs and networks of organizations in this field. Intensive work is under way with other United Nations bodies to ensure a smooth transition towards the new joint and cosponsored programme.

Noncommunicable diseases

WHO is establishing a network of centres and a database in support of a global programme to monitor and prevent cardiovascular diseases, and continued to coordinate the 10-year, 26-country MONICA project which monitors trends and determinants in cardiovascular diseases and measures the effectiveness of interventions. The first comparable rates of incidence and case fatality for heart attacks were published. National programmes for the prevention of coronary heart disease were introduced in 41 countries. Cardiovascular disease risk factor trends over five years were evaluated, and a cardiovascular and alimentary comparison study was carried out in 20 countries. Guidelines for coronary heart disease and hypertension control are being prepared.

Noncommunicable diseases have a number of common risk factors and an integrated approach to their prevention is promoted. Sixteen INTERHEALTH demonstration projects have been set up worldwide (9 of them in developing countries) to assess the effectiveness of integrated community-based intervention. The related CINDI programme now covers 21 countries in Europe.

WHO prepared a manual on palliative care for home care givers and guidelines on cancer pain relief, updated a model list of 24 essential drugs for cancer chemotherapy and produced a handbook and policy documents on the public health approach to combating cancer. National cancer control programmes are being developed in over 40 countries that have established "foundation measures" which provide at low cost the essential managerial, political, educational and legislative framework for the implementation of effective national measures. An epidemiological study on diet and cancer is under way. Support was given for the
implementation of national cancer pain relief and palliative care policies in over 46 countries, and an active international network of national experts, collaborating centres and NGOs has been established. The appropriate use of relatively simple therapies, especially radiotherapy, is promoted, as is education on palliative care and the use of opioids. A study was completed on the role of human papillomaviruses in cervical cancer.

The applicability of modern technology to the control of hereditary diseases is being investigated. An international multicentre study was launched on the predictive value of individual genetic and environmental risk factors for hereditary hypercholesterolemia. Guidelines were issued on monitoring for birth defects and for the control of haemoglobin disorders. A European register of patients with cystic fibrosis and an Asia/Pacific working group on the control of haemoglobinopathies were established. As part of efforts to strengthen national genetic programmes, WHO supported a number of international studies, including the international human genome research project, and cooperated with the World Federation of Hemophilia in studying modern treatment methods emphasizing gene therapy.

With regard to other noncommunicable diseases, national diabetes programmes were set up in three countries and are under preparation for all European Member States. Continued support is given to research on diabetes and atherosclerosis. A global strategy for management of asthma is being developed. Community-oriented programmes for the control of rheumatic diseases were expanded to five countries, and WHO's recommendations on prevention of rheumatic fever/rheumatic heart disease are already being applied in 24 countries. Health education booklets on this subject were published.

**Mental health**

Guidelines were issued on primary prevention of mental retardation, epilepsy and suicide and on the use of essential treatments in psychiatry. An assessment of the burden on relatives of caring for a demented person at home was undertaken. Booklets were produced on family care of a relative with Alzheimer disease and with schizophrenia. Psychological problems seen in primary health care were studied with a view to developing treatment guidelines, as were the long-term course and outcome of schizophrenia, obsessive-compulsive and other disorders. Clinical descriptions and diagnostic guidelines for the mental and behavioural disorders section of the International Classification of Diseases (ICD-10) have now been translated into 18 languages and their dissemination and application promoted. Guidelines were produced on life-skills education in schools and on stimulation by carers during early childhood.

An international review of mental health legislation was undertaken. Methods for assessing systems of mental health care were developed. A series of national and regional meetings on neurology and public health was initiated. The network of health authorities on support and rehabilitation of people disabled by chronic mental illness continued to provide guidance in this field. National and regional seminars on diagnostic guidelines and criteria were organized and training workshops held for researchers on the use of WHO interview schedules.

**Substance abuse**

WHO maintains constant vigilance over the abuse potential of psychoactive substances. As part of a mechanism in effect since 1949, a WHO expert committee reviewed data on selected psychoactive substances and issued advice on the need for regulatory control. Rational prescription of psychotropic pharmaceutical products is being
Box 13. Effective influenza vaccines

Every year WHO calls a meeting which makes recommendations as to the composition of the influenza vaccine for use in the forthcoming epidemiological season. These recommendations enable manufacturers to produce the correct type of trivalent influenza vaccine which will be used as of September/October in the same year and thanks to which countless lives — and hospital days and workdays — are saved each year.

The influenza virus is a master at disguising itself by rapidly changing parts of its genetic material. Occasionally a completely new subtype appears, triggering a worldwide pandemic, as in 1918, 1957 and 1968. But even small changes in the virus can cause severe epidemics. Since 1933, when the virus was first grown, only four subtypes of human influenza virus have been identified.

Vaccines which are not close to the strain of virus currently in circulation are of low efficiency. The virus is therefore kept under high surveillance by WHO, through a worldwide network of 118 national influenza centres in 81 countries. These centres isolate the virus from suspected influenza cases, determine what type it is and follow the spread and the gravity of the disease by monitoring, for instance, absenteeism in industry and schools and trends in mortality. International compatibility is ensured because all centres use diagnostic kits which are distributed by WHO free of charge each year.

The national centres also send samples of the isolated strains to one of three WHO collaborating centres in Australia, the United Kingdom and the USA, where they are received within one or two days. Each keeps a collection of reagents to many variants of the virus, allowing a comparison of their antigenic character. Information from the national centres and the collaborating centres is sent to WHO headquarters where it is collated and published in the Weekly epidemiological record. In cases of emergency, such as the isolation of a new type of virus, the information is sent to all Member States by fax, telex or telegraph. A weekly influenza update is available on the WHO computer server.

promoted in a number of developing and central and eastern European countries, and a programme on rapid assessment of substance abuse launched in selected African countries. The first phase of a project on drug injection and health risks in 13 countries was completed. Work is proceeding with UNDCP and ILO in five countries on a project dealing with alcohol and drug abuse in the workplace, and with UNHCR on approaches to the prevention of substance abuse among refugees. Research continues on problems of drugs and sports and the social and economic consequences of drug abuse. Support is given to Mem-

ber States in reviewing policies and legislation on treatment and rehabilitation for drug and alcohol dependence, in elaborating techniques for substance abuse prevention, and in providing ad-

Women's health

Joint policy statements are being prepared and disseminated with UNICEF and UNFPA on major public health issues of concern to women, including AIDS prevention, female genital mutilation, traditional birth attendants, and breast-feeding and HIV. A global action plan on safe motherhood is being implemented with the World Bank and Mothercare (USA), and national safe motherhood action plans were formulated in 10 countries. A country needs assessment instrument for safe motherhood was devised, and the mother-baby package of cost-effective interventions to reduce maternal and neonatal mortality introduced (Box 8). Database systems for monitoring patterns and trends in maternal health are being disseminated. A report on women's health and human rights was issued, and a European women's health forum established. An in-depth analysis was made of the health situation of women in central and eastern Europe. By end 1994, 87 research projects were being funded, many focusing on the main causes of maternal death and disability. Some of the studies seek to determine the feasibility of integrating sexually transmitted disease control activities into family planning services. In May 1994, taking into account WHO research, the United States Food and Drug Administration extended the duration of continuous use of the intrauterine device TCu380A from nine to ten years. Research on the determinants of induced abortion in developing countries showed that it is not restricted to the unmarried but is also used by married women to limit family size in the absence of effective contraception. A project was launched to promote simple methods for the early detection of cancer of the cervix and
breast in developing countries, and in Europe a study is under way on self-examination of the breast. Quality indicators for the care of breast cancer patients and for perinatal/obstetric care were developed and tested.

Health of the elderly

WHO activities are primarily directed to facilitate healthy aging and thus enable the aging population to exercise their full potential as a resource in the community. Various WHO divisions carry out activities concerned with aging and health; including those responsible for health research (osteoporosis and older women's health); noncommunicable diseases (home care); cardiovascular diseases (stroke and hypertension control); nutrition (anthropometric measures); occupational health (aging and working capacity); family health (health of older women); cancer and palliative care (home care for terminally-ill cancer patients, quality of life); epidemiological surveillance and statistical services (healthy life expectancy network); mental health (dementia, particularly Alzheimer disease, and the burden of care within the family; quality of life assessment; prevention of blindness; emergency and humanitarian action (rehabilitation/relocation of elderly refugees and survivors of natural and other disasters); and diabetes. Annual immunization against influenza is important for older persons and WHO ensures that the most effective vaccine is available every year (Box 13).

Examples of WHO’s work include the launching of a multinational collaborative study on predictors of osteoarthritis, and a study on the socioeconomic and health status of the elderly in five counties of South-East Asia, which will serve as a useful tool for promoting national strategies and plans for care of the elderly. In pursuance of the United Nations international plan of action on aging, WHO is setting up an integrated programme on aging and health, which will become fully operational in 1996.

General health issues

Programme activities relevant to all age groups concern in particular tropical disease research and control, cholera, zoonoses, accident prevention, rehabilitation, oral health, blindness and deafness.

Disease prevention and control

The WHO global plan of action for the elimination of leprosy has been adopted by the endemic countries. All now have national strategies and plans of action to eliminate the disease as a public health problem by the year 2000. WHO closely monitors progress towards elimination of the disease and supports independent evaluation of national programmes. The establishment of such programmes has been instrumental in helping several endemic countries and areas in the Western Pacific to reach the target of less than 1 case per 10,000 persons, and in greatly reducing the leprosy problem in South-East Asia.

1994 marked the 20th anniversary of the onchocerciasis control programme in West Africa (OCP) sponsored by UNDP, FAO and the World Bank with WHO as executing agency. The number of donors making long-term commitments to the programme now stands at 21. Larviciding, allied with drug treatment has so far succeeded in eliminating the disease as a major public health problem in 11 endemic countries in Africa. In the Americas a multinational, multiagency and multidonor coalition has been established to support and coordinate national plans to combat the disease in the six endemic countries. Outside the OCP area, plans are under way to support onchocerciasis control in the remaining African countries where the disease is a public health problem.

Remarkable progress has been made since programmes for eradication of dracunculiasis (guinea-worm disease) first began in the late 1980s and early 1990s; rational and international support for eradication measures is manifest. A reliable village-based surveillance system has been implemented, with a
monthly reporting system operational in all countries. In Pakistan, compared with 1988 when 400 cases were recorded, no case was reported in 1994. Cameroon is close to having totally eradicated its only active focus; the number of cases fell from 871 in 1989 to 9 in 1994. Effective control measures in Ghana and Nigeria have seen extraordinary reductions in annual incidence, from 833,048 cases in both countries in 1989 to 9,670 in 1993.

By December 1995 it is expected that dracunculiasis will be eliminated from most of the endemic countries and that there will be a 95% reduction from the 1 million estimated cases in 1989, with the exception of Sudan, for which reliable figures are not available.

A campaign to eliminate Chagas disease was launched in the Southern Cone of the Americas (Argentina, Brazil, Bolivia, Chile, Paraguay and Uruguay), and is to be coordinated by an intergovernmental control commission. National plans and programmes have been prepared, and four countries have already enacted legislation that makes blood screening for the disease compulsory. WHO is coordinating a multicountry programme and supporting the development of slow-release insecticidal paints which have been shown to be nearly twice as effective as traditional sprays in controlling the triatomine vectors and about half as expensive. Funds are provided for operational research to improve spraying operations and blood bank screening. Interruption of vector and transfusional transmission of Chagas disease has been achieved in Uruguay (1994) and Chile (1995).

Support is given for training in the epidemiology and control of schistosomiasis. A new candidate vaccine has been identified, and other antigens are at an advanced stage of development towards human field trials. Mass treatment with praziquantel is an efficient way of controlling schistosomiasis when targeted at schools with the largest number of infected children, and a simple questionnaire has been designed which could help identify them. This approach is being tested in several African countries. Simultaneous treatment with praziquantel and a broad-spectrum anthelminthic has been demonstrated to be safe. It has also been shown that simultaneous delivery of the drugs reduces the cost and increases the effectiveness of interventions.

Integrated human and animal trypanosomiasis programmes were submitted to the European Union for support. Guidelines are being produced on control methods involving community participation. The effectiveness of seven-day treatments with efomithine was demonstrated. The drug is expensive, but WHO was able to provide it to four countries on a cost-recovery basis. A low-cost synthesis and production method is being developed.

WHO, together with UNICEF, provided emergency supplies for serological diagnosis and drug treatment of visceral leishmaniasis during a recent epidemic in Sudan. A surveillance system involving a network of 14 institutions in the Mediterranean basin was set up to cope with the emerging problem of HIV/Leishmania co-infections. A standardized case report form and guidelines for diagnosis and treatment were prepared.

Guidelines for implementation of the global malaria control strategy were produced and adapted to regional needs. Already 25 of the 45 malaria endemic countries of Africa have drawn up plans of action and 10 are implementing them according to the strategy. WHO in collaboration with other agencies and NGOs responded promptly to requests for assistance to combat epidemics in seven countries, including epidemics among 500,000 Rwandan refugees. Guidelines on diagnosis and treatment of malaria in Africa were produced and distributed in French, English and Portuguese.

Progress has been made in many countries towards the required reorientation of their national programmes in line with the global strategy, although the process of reorientation of programmes in the Eastern Mediterranean is being seriously hampered by political instability and wars in a number of countries.
Whilst most countries in the Americas have made major steps in integrating the traditional malaria control organization into the general health services at the central level, integration at local level has been attempted in only a few such as Brazil, Colombia, Honduras and Nicaragua. Several countries in the Americas have had to revise their legislation to allow for the integration of services and to promote intersectoral collaboration.

In view of the rapid spread of chloroquine-resistant and multidrug-resistant falciparum malaria, a long-term multicentre collaborative research programme was initiated to study ways of retarding further development of drug resistance. The status of resistance is continuously monitored in all the malarious countries of South-East Asia.

The integration of malaria control with the strategy of primary health care varies in the Western Pacific, in keeping with the way each country has built up its primary health care activities. Integration with the general health services exists in several countries but there are problems at the periphery where workers have difficulties in giving time to the necessary health education and preventive measures.

The synthetic Colombian malaria vaccine, SP66, has been extensively studied in South America and more recently in Africa and South-East Asia (see Box 14). It has given promising results in studies in the United Republic of Tanzania. Multicentre field trials of insecticide-treated bednets are under way in four African countries to assess their effect in reducing mortality in children under age 5. A multicentre field study was initiated to validate a newly developed dip-stick method for detection of falciparum malaria.

Guidelines for the diagnosis, treatment and control of dengue and dengue haemorrhagic fever were finalized, and national prevention and control strategies are being prepared. With support from WHO, Mahidol University in Bangkok developed a tetravalent live-attenuated dengue vaccine. Clinical trials have shown that it is safe and the immunological response encouraging, and it is hoped that it will be ready for phase III (efficacy) testing shortly.

The public health implications of lymphatic filariasis are being assessed, and pilot control programmes initiated in some countries. Multicentre field trials of ivermectin and new regimes of diethylcarbamazine citrate (DEC) showed the two drugs to be equally effective. Antibiotics, antifungal agents and simple local hygiene were found to reduce elephantiasis.

Box 14. Malaria vaccines

A number of vaccines of potential value in controlling malaria are currently under development. Asexual blood-stage vaccines are designed to reduce severe and complicated manifestations of the disease. They could lower morbidity and mortality in African children under age 5, a particularly high-risk group, and their development is therefore given priority by WHO. A second type of vaccine is designed to arrest the development of the parasite in the mosquito and thus reduce or eliminate transmission of the disease. Research on both types of vaccines is being supported by UNDP/World Bank/WHO.

Asexual blood-stage vaccines are based on antigens derived from the blood stages of Plasmodium falciparum present in man. Several are being studied. Together with WHO and USAID, the European Union has established a malaria antigen database for use throughout the world through the Internet. In addition collaborative efforts are under way in the USA to purify sufficient amounts of merozoite surface protein 1, an antigen which has been shown to protect monkeys from infection. Clinical trials using this material could be initiated by late 1995. Trials of two other leading recombinant candidate vaccine antigens, sezoite rich antigen and an apical membrane antigen, could begin in 1996.

A synthetic "cocktail" vaccine for P. falciparum, called SP66 and developed by Dr M. Patarroyo in Colombia, has been tested extensively in South America and more recently in Africa and South-East Asia. This vaccine, formulated as a peptide-alum combination, was selected for clinical studies on the basis of its ability to protect monkeys from infection. A recent field study among children under age 5 in the United Republic of Tanzania showed that the vaccine was safe, induced antibodies and reduced the risk of developing clinical malaria by about 30%. These findings together with the results from South America confirmed the potential of the vaccine to confer partial protection in areas of high as well as low transmission. Other studies in the Gambia in toddlers aged 6-11 months and in Thailand in children aged 2-15 years are due to be completed by mid-1995.

A meeting to review all the available data on SP66 will be held in September 1995. It will then be decided whether to undertake further studies to determine its potential for reducing malaria mortality and complications in African children under age 5. If a significant reduction in mortality is observed, registration of the vaccine would proceed.

As far as transmission blocking vaccines are concerned, Pf25 is a leading candidate and a preparation based on it should go into clinical trials in the USA and Africa during 1995.

Any effective malaria vaccine approved for large-scale application would be used as part of integrated malaria control measures including other protective interventions and disease management.
WHO's global task force on cholera control, with the collaboration of the Swiss Disaster Relief Unit and the governments of Australia and Italy, continued to support activities to strengthen countries' capacity to prepare for and respond to epidemics of cholera and dysentery. Multidisciplinary teams were sent to help combat outbreaks of cholera in Somalia and of cholera and dysentery among Rwandan refugees in Zaire. WHO supports a laboratory surveillance system for monitoring drug resistance in the causative organisms that is available to all the cholera-prone countries in Africa, the Eastern Mediterranean and South-East Asia.

Several vaccines are at different stages of development. Grants were provided to Myanmar, Nepal, Sri Lanka and Thailand for strengthening their laboratory capabilities to isolate and characterize *Vibrio cholerae* strains which first appeared in southern India towards the end of 1992. A grant was given to India for large-scale production of O139 antiserum, which was made available to all the cholera-prone countries in Africa, the Eastern Mediterranean and South-East Asia. Because of the potential of the new strain to cause another pandemic, national diarrheal disease programme managers, government officials, scientists, and staff from WHO and UNICEF made an in-depth review of the situation.

Global surveillance of emerging and re-emerging *zoonoses* such as rabies, salmonellosis, echinococcosis, liver fluke infection and salmonellosis is being strengthened, and research and technology transfer coordinated. A variety of training courses, consultations and workshops are organized regionally and interregionally.

**Oral health**

A global database is maintained, support given for situation analyses and the formulation of national plans to promote oral health. WHO participated in the launching of a district-based oral health project in 8 countries. A study on oral health outcomes was completed in 6 countries using a single protocol linking sociological and clinical data. An international collaborative oral health research initiative is being launched in collaboration with the International Dental Federation, the International Association for Dental Research and the International Federation of Dental Education Associations. An international action network was established on noma and other mutilating diseases and accidents of the face and mouth in African countries. New technologies were introduced for treating dental caries without a drill, water or electricity.

**Accidents, violence and suicide**

Guides on burn prevention and management are being produced with the International Society for Burn Injuries, and multicentre epidemiological studies on brain injury conducted. A network of demonstration projects on community safety was expanded to 13 countries, and a WHO initiative on spinal cord injury prevention launched. Training materials on injury prevention are being produced, and methodologies for risk assessment continuously monitored and updated.

There has been a significant improvement in meeting the rehabilitation needs of the 35 million persons with disabilities in Africa, using the community-based district health approach pioneered by WHO. Consultant services were provided in 10 countries on programme planning or evaluation, and plans drawn up on strengthening services for refugees and people living in slums. Two intercountry workshops were organized on the management and review of rehabilitation programmes.

**Blindness and deafness**

Global data on blindness were updated. Quality standards were prepared for small-scale manufacturers of intraocular implants used in cataract surgery. Joint action with NGOs was strengthened through the establishment of a task force on coordination, and extrabudgetary funding mobilized to provide technical support. Advocacy for blind-
ness prevention was strengthened in collaboration with the International Council of Ophthalmology and the International Agency for the Prevention of Blindness.

Technical support was provided for workshops on the formulation and management of programmes for prevention and treatment of deafness. Awareness of the problem and the need for action was promoted in collaboration with Hearing International.

**Lifestyles and environment**

Two of the changes needed to achieve health for all are concerned with a healthy environment and healthy lifestyles and require initiatives by the individual, the family and the community. Activities are carried out in the areas of mental health, healthy public policy, social support systems, healthy living, tobacco, alcohol and psychoactive drug use as well as housing, pollution and food safety. Many of the measures require government involvement at central, regional and local levels and well-integrated, multisectoral planning and management.

WHO promotes healthy lifestyles by mobilizing public opinion and the media and strengthening health education and advocacy for health. A school health education resource centre and database were developed, and two regional networks of health promoting schools established. The health promoting schools project established in Europe in 1992 now covers 28 countries. The regions for health network in Europe, founded in 1992, was expanded to include 20 regions.

Global data on tobacco are systematically collected, computerized and distributed. Support is given for the development and monitoring of national tobacco control programmes. Within the framework of the European action plan for a tobacco-free Europe, agreement was reached to use tobacco control laws and litigation as public health tools. The Winter Olympic Games in Lillehammer (Norway) were smoke-free as a result of collaboration between the International Olympic Committee and WHO. The theme of the 1994 WHO World No-Tobacco Day, “The media and tobacco: getting the health message across”, was widely picked up by the media, thanks to national and local activities around the world.

“Africa 2000”, a new investment initiative aimed at providing universal coverage of water supply and sanitation services, was launched. A broad programme for hygiene education and promotion of low-cost sanitation is being developed in cooperation with UNICEF and other bilateral and multilateral organizations. Key hygiene behaviours and principles for promoting sanitation were identified. Modules for water supply, sanitation and disposal of solid wastes were developed for UNRWA, and WHO/FAO/UNEP collaborative research initiatives were launched with regional research agencies. A joint project is under way with the United States Environmental Protection Agency to strengthen environmental monitoring and legislation in small communities. Training packages and manuals on the proper operation, maintenance and optimization of systems are being prepared, and one on health in water resources development is being tested.

In the field of urban health the global network of healthy cities has been expanded in all regions, and now includes over 650 cities. At the same time close partnership has been established with the OECD ecological cities project. The healthy cities project, launched by WHO, has proved highly effective in mobilizing action on alcohol, HIV/AIDS, diabetes, disability, health-promoting hospitals, nutrition, primary health care, tobacco-free cities, sports, the unemployed, and women and health. Support is given in strengthening national mechanisms for priority-setting, planning and local environmental health research.

The global WHO/UNEP networks for air and water quality monitoring are operational in more than 60 countries, and a comprehensive report on urban
Box 15. Food safety

Foodborne diseases result from contamination of food with bacterial, viral, parasitic or chemical agents. Although no precise information is available, the problem of food contamination and foodborne diseases can be estimated to be immense on the basis of data on the incidence of diarrhoeal diseases. In addition to acute symptoms, contaminants of food can cause severe and chronic health problems, which are less well known. Some foodborne trematodes are believed to be the underlying factor in liver cancer. Salmonellosis and campylobacteriosis have been found to cause reactive arthritis in some subjects. Enterohaemorrhagic Escherichia coli can cause severe disorders of the renal system. Listeriosis and toxoplasmosis are particularly dangerous during pregnancy, as they can be fatal to the fetus, or may result in severe deformity. Heavy metals, like lead, can severely affect the nervous system. Foodborne diseases can lead to severe growth stunting. Infants and children become less resistant to other infections and are caught in a vicious downward spiral of infection and malnutrition leading in many cases to death. Foodborne diseases incur tremendous economic costs in terms both of reduced productivity and of medical care. During the 1991 cholera epidemic Peru had to sustain medical care costs for the thousands of people affected. In addition its food exports decreased substantially and its tourism industry was affected.

Food can become contaminated at any stage in the food chain, from production to processing and handling prior to consumption. Therefore the causes of foodborne diseases tend to be multiple and interdependent. In developing countries lack of basic sanitation and use of untreated night-soil as fertilizer or untreated wastewater for irrigation allow pathogens to be introduced into the food chain through the water. In developed countries improved standards of living have led to a rise in consumption of food of animal origin. The resulting mass production of animals has increased the risk that many will be subclinically infected with foodborne pathogens such as Salmonella and Campylobacter. Research continues under WHO auspices on the uses of irradiation and modern biotechnology to improve the food supply.

Traditions and beliefs also contribute to the occurrence of foodborne diseases in both developed and developing countries. For example in some cultures raw meat products, raw fish or raw milk are traditional foods, despite the health risks. Finally some diseases are imported from endemic areas because of the growing number of international travellers, for whom WHO has published a popular guide.

Because of its role in the spread of contaminants, the Codex Alimentarius system was set up to facilitate world trade in food, promote fair practices and protect consumers by establishing internationally accepted standards. Standards are set in such areas as maximum allowed amounts of pesticide residues and contaminants in raw materials, labelling of food and maximum content of approved food additives, in addition to codes of hygienic and technological practice. Application of the standards not only protects the health of consumers, but avoids the temptation to use health-related national standards as an excuse for unfair trade practices. The standards are set by the Codex Alimentarius Commission which is jointly sponsored by FAO and WHO. It works by harmonizing national standards in consultation with governments, trade and industry representatives, consumers’ associations and others. Some 200 standards and 140 codes and guidelines have been published in 25 volumes in 3 languages. Until recently these instruments were sent to governments as recommendations for action. With the signature of the Final Act of the Uruguay Round of multilateral trade negotiations launched by GATT, those related to food safety became internationally recognized reference values.

Air quality in megacities was published. Surface- and ground-water quality are monitored in over 350 cities worldwide, and several methodology guidelines were issued on sampling and analysis of air and water. The distribution of revised WHO guidelines for drinking-water quality was followed by a series of national and regional seminars to stimulate the enactment and application of standards at national level. Guidelines for the safe handling and disposal of hospital and other infectious wastes are being prepared.

The major thrust for WHO activities in the sphere of food safety is to support the adoption of modern food safety strategies that no longer rely exclusively on end-product testing but rather focus on monitoring “critical control points” in food production and processing and on promoting awareness of problems and stimulating information development and transfer. WHO takes a multidisciplinary and multi-sectoral approach to the prevention of foodborne diseases (Box 15). Two new collaborating centres for food safety were designated, and several projects implemented. Risk assessment of chemicals in food is being strengthened, and food contamination by heavy metals, industrial chemicals and pesticides monitored through a joint UNEP/FAO/WHO programme. Together with FAO, WHO has established acceptable daily intakes for well over 700 food additives, contaminants and veterinary drug residues in food. WHO cosponsors regional and subregional courses and workshops on food safety. WHO and FAO support the Codex Alimentarius Commission, an intergovernmental body with a current membership of 146 countries, which encourages the development of scientifically-based and internationally-agreed food standards. The recently concluded Uruguay Round of multilateral trade negotiations recognizes Codex standards, guidelines and recommendations as international reference values to ensure that unnecessary or overly restrictive requirements are not used as non-tariff barriers to international trade.
Health infrastructure

Coverage, accessibility and quality of care are three basic requirements in health development. Coverage depends on the availability of suitably located facilities where quality care is given to the whole population by well-trained health workers using appropriate technologies. Many problems have been encountered in building up health infrastructures, ranging from lack of clear national policies and leadership, to inadequate resources and bad management.

Health services worldwide are being reformed to meet the challenges forced on countries by dramatic economic and social changes. The reforms are to the extent possible based on the primary health care approach, are in line with global, regional and national health strategies and are designed to ensure equity in health care, allied with greater efficiency and effectiveness. Specific activities are concerned with the organization of health systems based on primary health care; the development of human resources for health; clinical, laboratory and radiological technology; the provision of essential drugs; drug and vaccine quality, safety and efficacy; and traditional medicine.

As part of its support to governments in the organization of health systems based on primary health care, WHO provides them with updated information on ways to manage change. It advises on particular aspects of reform such as the appropriate mix of public and private services, decentralization, and effective links between central authorities, district health systems and local communities. It helps health policy-makers to identify priority areas. In the Western Pacific, for example, a forum was organized to enable countries to share experiences in health development; and support was given to several South-East Asian countries in formulating new health policies and strategies as part of a reorganization of their health systems. In Europe urgent attention was paid to the revitalization and modernization of sometimes inefficient, unbalanced and inert medical care systems. Emphasis was placed on attracting more financial resources, decentralizing and dismantling monolithic top-down structures, remotivating health care workers, and making systems more rational, efficient and responsive to consumers. A manual on a "basic minimum needs" kit was produced and will be issued in the near future. A national quality assurance system was established in Saudi Arabia and is being introduced in other Eastern Mediterranean countries. Saudi Arabia, with WHO support, published four reference manuals on quality of health care, dealing with primary health care, nursing, health inspection and pharmacy. These documents have been widely distributed and adopted by other Member States. WHO collaborates with a number of countries in the Eastern Mediterranean in improving national health information systems and establishing the managerial process for health development.

Health care financing systems are being restructured in several countries in the Americas, and application of the "basic minimum needs" approach is being accelerated. There are moves to expand the role of the private sector in the provision of health care in South-East Asia. Generally people are becoming increasingly interested in the services they receive and pay for, either as consumers or as taxpayers. Greater attention is being given to the financing of health systems in the Western Pacific. Experiments are under way with insurance schemes, public or private partnership, incentive payments, cost sharing and cost recovery.

In the Western Pacific the primary health care approach is being adapted to address new challenges. Priority is given to emerging health needs in connection with urbanization, environmental change and chronic diseases associated with lifestyle. Countries in South-East Asia are strengthening their district health systems based on primary health care with emphasis on reaching underserved and unserved populations.
All African countries have adopted and are implementing the African health development framework, whereby community-oriented, locally managed activities are carried out with appropriate support from district, intermediate and central levels of the health system and other sectors. There is now a consensus that a well-defined district health-for-all package, with specified minimum activities, is a good tool for extending services beyond simple curative care to include health promotion and prevention.

Through research and direct support of countries, WHO actively promotes community involvement in health aimed at enabling people to take responsibility for decisions concerning their health and to make their health services more effective. Community involvement in health now seems to be widely accepted in most countries. It finds its expression in such ways as ensuring equitable and rational distribution of resources for health; mobilizing funds from local, national and international sources; and making good use of the knowledge and experience available within the community. The topic of community action for health was extensively discussed by the World Health Assembly in 1994.

As part of efforts for the development of human resources for health, WHO launched an initiative to determine optimum approaches to the training of health personnel under changing socioeconomic conditions. In the Americas emphasis is given to the management of education programmes for the medical and related professions. WHO is devising tools for policy analysis and planning in the Eastern Mediterranean and South-East Asia. It collaborates with countries in reviewing health personnel policies and plans within the perspective of existing economic constraints. In the Western Pacific several reviews of public health training and medical education were carried out; they highlighted the need to reorient health personnel planning and training to the requirements of health development over the next five years. WHO continued its efforts to enhance national capabilities to design and implement appropriate programmes for medical, nursing and other health personnel, and gave intensified support to national educational institutions. WHO fellowships are being monitored and evaluated to ensure that they are relevant to national health-for-all strategies.

National action plans on nursing and midwifery are being prepared together with a plan for regional and interregional action in support of WHO's goals through collaborating centres. Strategies are being developed to upgrade the quality of nursing practice through networks of chief nursing officers. A meeting of chief nursing/midwifery officers, educators and managers from eastern and southern Africa was held to discuss ways to give nurses and midwives a greater role in improving health care at district level. WHO collaborates with the International Confederation of Nurses, the International Confederation of Midwives and other NGOs in this field. Microcomputer-based models for projecting staff availability and requirements are being field-tested, using workload indicators to determine staffing needs. A guide on functional job analysis is being prepared.

WHO plays a central role in promoting health technology assessment in developing countries, particularly in relation to primary health care, disease prevention and control, nutrition and environmental health. Materials produced on this subject included a handbook of principles for the management of radiological services; guidelines for planning and organization of small imaging departments; new technical specifications for the WHO radiographic unit as part of the WHO imaging system; a set of standard radiographs for reference use in small hospitals and radiology practices; and a manual on radiation protection in hospitals and general practice. Basic safety standards on radiation protection and radiation sources are being established with FAO, IAEA, ILO and OECD. A number of studies were carried out on development of a standard
cold chain for blood; the incidence of HIV following blood transfusion; and inactivation of viruses in blood products. Portable laboratory instruments and photovoltaic equipment are being tested, and field trials of an oxygen concentrator machine that meets WHO specifications conducted jointly with the World Federation of Societies of Anaesthesiologists. A new training centre on repair and maintenance of medical equipment is being set up in the Syrian Arab Republic in collaboration with UNDP.

In the field of pharmaceuticals, the Organization collaborates with national drug regulatory authorities in harmonizing approaches to drug registration and surveillance, establishing international standards for quality assurance, and exchanging information on national regulatory decisions. The rational use of drugs can be ensured only within a well-defined framework of regulation. Through its model lists and related prescribing information, WHO helps countries to foster cost-effective drug use and procurement. Activities concerned with the promotion of national drug policy are described in the following section, under Health policy.

The WHO model list of essential drugs, which helps countries to match priority drugs to priority health needs, is revised and updated biennially. Collation of an international database on suspected adverse drug reactions continues. The content and scope of WHO’s model prescribing information are being expanded, its ethical criteria for medicinal drug promotion reviewed, and its recommended good practices in the manufacture and quality control of drugs updated. Pharmacopeial standards and other requirements for pharmaceutical and biological products continue to be established, and international proprietary names for pharmaceutical substances selected.

A model software package was produced to support drug registration using a desk-top computer. Basic tests are being devised to verify the identity of pharmaceutical substances outside a laboratory setting. Good manufacturing practices have been extensively revised, and proposals formulated for the registration of generic products. Guidelines for implementation of the WHO Certification Scheme on the Quality of Pharmaceutical Products moving in International Commerce are being field-tested.

WHO assists in incorporating traditional medicine into national health systems in countries where it is widely practised, and promotes operational research, clinical investigations and exchange of information on the subject. A comparative review is being made of legislation on traditional and alternative medicine, and guidelines prepared on safe techniques and basic training in acupuncture. A study is under way on the indications and contraindications of acupuncture.

**Health policy**

The most important way in which WHO influences national health development is by helping to shape health policy. The Organization works closely with Member countries in analysing and designing policies concerned with health, helps strengthen national managerial capabilities, supports countries in implementing and evaluating their national health-for-all strategies, and advises on the application of health information systems. Technical support is given in formulating policy relating to health legislation, drugs and environmental health, including assessment of the risk of potentially toxic chemicals.

A major step was taken in the area of women, health and development. In 1993 the Global Commission on Women’s Health was established as an advisory body to WHO. It drew up an agenda for action on women’s health covering nutrition, reproductive health, the health consequences of violence, aging, lifestyle-related conditions and the work environment. It has raised awareness among policy-makers of women’s health issues and encourages their inclusion in all development plans as a priority. A report on women’s health
At the 1994 International Conference on Population and Development in Cairo, WHO played a key role in helping to reach consensus and transcend political and religious differences.
external evaluation of the programme showed that it has been successful in supporting countries in need. Helping countries to prepare a framework for international collaboration along the lines of health for all is now considered more important than ever. By the end of 1994 WHO was present in all the new independent states with 21 WHO liaison offices in operation. Support was provided for fund-raising, health care reform, procurement of pharmaceuticals and vaccines, and implementation of programmes in such areas as immunization and maternal and child health including family planning and breast-feeding. Medium-term collaboration programmes were prepared for new independent states and for Israel, Malta and Turkey. An expert network on health care financing strategies placed specialized knowledge at the disposal of new independent states and influenced the direction of their reforms and health legislation. A WHO advisory group on health care reforms in Europe was set up.

WHO works with bilateral agencies, other United Nations bodies and NGOs in developing national drug policy frameworks and collaborates with 55 countries on such questions as drug selection, legislation, manufacture and quality assurance. National drug policies were formulated in Egypt and Yemen and existing policies reviewed in Sudan and Tunisia. WHO promotes North-South transfer of drug production technology as well as quality assurance and good manufacturing practices, particularly in Africa and South-East Asia. A list of life-saving drugs was prepared and is proving valuable in new independent states which have suffered acute shortages.

Policy-related operational research projects are being implemented on the financing, management and rational use of drugs and vaccines, and studies continue on the impact of the private sector on drug supply, and on measures to stimulate the availability of generic essential drugs. Findings were disseminated through universities, networks and publications. Guidelines, tools and training materials were distributed on such topics as policy and management, supply and logistics, quality assurance and rational drug use.

WHO facilitates access to a number of databases through WHO Gopher, World Wide Web and Telnet. These contain information on WHO and its programmes, press releases and specific technical data on such subjects as communicable diseases and HIV/AIDS. Through the Internet facility WHO has established several bulletin boards on health technology, tools for health research and nursing in the 21st century among others. An international electronic bulletin board capability for discussing health futures was set up. A WHO information centre for health was opened in Kyrgyzstan to serve the central Asian republics.

In collaboration with Member States WHO completed the monitoring of progress towards health for all by the year 2000 and prepared a third report on the findings for submission to the WHO governing bodies in 1995. Country health profiles as well as computerized regional and global health-for-all databases were updated. Support was given to over 30 countries in preparing national language versions of the tenth revision of the International Classification of Diseases (ICD-10) and in implementing the revised classification, particularly by providing guidelines and organizing training courses.

WHO has launched a new health futures research initiative for exploring probable, possible and preferable futures in relation to such issues as the health trends expected in the next millennium and the probable impact on health of technologies that are likely to emerge during the next decade. Some of the methods were considered at a 1993 WHO consultation on health futures methodology, and results are now being assessed in countries for their relevance and feasibility. Findings are shared through a network of over 300 experts on health monitoring, evaluation and futures studies.
Periodically WHO assesses the global health situation and trends for some priority diseases and conditions and disseminates the findings through publications, for instance dealing with the world health situation and projections. Following a decision by the WHO Executive Board in 1994 concerning the recommendations of its working group on the WHO response to global change, steps were taken to make annual assessments of global health status and trends and to issue the findings as from 1995. The present publication, The World Health Report 1995 – bridging the gaps, was prepared in response to that decision.

Coordination

WHO's coordination activities involve support to sessions of the WHO governing bodies, partnership with other United Nations organizations, international development agencies and NGOs, mobilization of external resources, emergency relief operations, food aid and public relations. Highlights of WHO's collaboration with international and regional development agencies are given below.

The continuing crisis of development in Africa was recognized as one of the greatest challenges facing the United Nations system and the entire international community. WHO's major input was channelled through humanitarian programmes coordinated by the United Nations Department of Humanitarian Affairs and funded from consolidated appeals as well as the Central Emergency Revolving Fund (CERF). Appeals for financing health work were usually less well supported than other components, but WHO continued to stress the strong interrelationship between all aspects of humanitarian activities and the importance of linking emergency relief to reconstruction and development.

The growing awareness among Member States of the need to improve health care delivery systems, and a notable interest in the part of the World Bank to promote improvements in the social sector, provided a timely opportunity to forge closer links between WHO, the Bank and governments.

Joint collaboration with UNICEF focused on the 21 goals related to the health of women and children in the plan of action adopted at the 1990 World Summit for Children. The UNICEF/WHO Joint Committee on Health Policy reviewed progress with respect to the mid-decade summit goals (1995).

WHO cooperates with FAO in helping countries to consolidate their national plans of action for nutrition, as recommended in the 1992 World Declaration and Plan of Action for Nutrition. Joint meetings were organized in three regions and plans made to hold similar meetings in two further regions in early 1995.

The greater emphasis given to the social sector by the five United Nations regional commissions provided an opportunity for WHO to reinforce its relations with these organizations and to strengthen coordination of its work with other United Nations bodies. WHO collaborated with the Economic and Social Commission for Asia and the Pacific on such subjects as environment and sustainable development, HIV/AIDS, preventable diseases, disability and population.

Cooperation with the Commission of the European Union on emergency and humanitarian assistance to the countries of former Yugoslavia was intensified, with about one-third of the resources available for WHO activities coming from the commission. The Council of Ministers held two sessions on the European Union's "health in development" policies.

Together with the Organization of African Unity and other institutions, WHO pursued the priority objective of supporting African recovery and development. It assisted OAU in formulating a draft health protocol for the treaty establishing the African Economic Community (the Abuja treaty of 1991), which will provide a framework for health and development in Africa as a
whole. Other subjects of collaboration with OAU included a declaration on AIDS and the child in Africa; control of malaria; and a common position on disaster reduction in Africa.

In recent years WHO has significantly strengthened its collaboration with five major regional development banks: the African Development Bank, the Asian Development Bank, the European Bank for Reconstruction and Development, the Inter-American Development Bank and the Islamic Development Bank. The banks are giving higher priority to the social sector including health and environmental protection. WHO seeks to provide leadership in health and ensure its inclusion on the agenda of these institutions.

WHO collaborates on an ad hoc basis with a broad range of nongovernmental organizations. Formal relations may be established in cases where long-standing and mutually beneficial activities have grown up. In 1994 the number of international NGOs in official relations with WHO reached 184 with the admission of the International Commission on Non-Ionizing Radiation Protection, the International Consultation on Urological Diseases, the International Council for Control of Iodine Deficiency Disorders, the International Occupational Hygiene Association, the International Society for Preventive Oncology and the International Society of Surgery. With such partners WHO on the one hand reaches out to iodized salt on a family table, alert governments and occupational groups to the need for adequate health protection and promotion and ensures that the surgeon's skill is kept properly honed, and on the other serves as a global clearinghouse for exchange of vast amounts of experience and data.

The main objective of WHO's emergency relief programme is to strengthen the national capacity of Member States to lessen the adverse health consequences of emergencies and disasters.

Emergency preparedness focuses on coordination, policy-making, awareness-building, technical advice, training, publication of standards and guidelines, and research.

In 1994 WHO provided technical expertise and emergency medical supplies to cope with major natural or man-made disasters in Afghanistan, Angola, Burundi, Iraq, Somalia and Sudan, in former Yugoslavia and in some new independent states. Following outbreaks of cholera, meningitis and malaria in Africa, Europe and Latin America, WHO helped to mobilize international assistance and support for prevention and control.

From the very onset of the crisis in Rwanda, WHO assisted in assessing the situation and the emergency needs arising from it, in close association with the United Nations Department of Humanitarian Affairs. The cooperation grew steadily from April 1994 onwards and WHO is now responsible for providing the required coordination in the health sector, among other things in order to link the initial emergency response to rehabilitation and reconstruction of the health infrastructure throughout the country.

WHO took part in 10 joint missions with WFP concerned with the use of food aid in support of human resources development. The Organization's recommendations on prevention of disease and monitoring of disease trends were applied in food-for-work projects.

Publishing, language and library services

Countries throughout the world call on WHO for up-to-date, reliable and authoritative health information. For all of them, the overriding concern is how to obtain the right information at the right time with limited resources. Electronic networks and other modern information technology help to provide new ways of doing this. WHO publishes and distributes books and guidelines on priority health issues, translates essential technical and administrative texts,
and increases worldwide access to health information through libraries and health literature networks. For many health workers in developing countries, WHO materials are often the only source of reliable information on crucial aspects of disease control. For most, it is their only contact with an Organization which is there to serve them. Feedback, especially from developing countries, shows that much of the material, especially from *World health* and *World health forum*, is widely used and reproduced. The combined readership for these two journals and the *Bulletin of the World Health Organization* is estimated at 700,000. The network of sales agents and clients on account now covers over 100 countries, and annual revenue from sales of WHO publications has reached nearly $4 million. This revenue is used to finance the further circulation of WHO books and periodicals to the extent that 80% are distributed free of charge.

**General administration**

Largely because of the economic climate that has prevailed over the last decade, and a zero or negative growth budget in real terms, a particular concern has been to achieve cost savings and cost avoidance. Bearing in mind the need to limit adverse effects on the Organization's programmes, operations are being streamlined and improved, particularly in the areas of new technology (e.g., introduction of electronic mail facilities, computerization of records management, preparation of inventories of office equipment; contracting out (e.g., grounds maintenance, night security, cleaning); downsizing (e.g., reduction in the frequency of mail distribution); and redistribution of resources (e.g., a shift from administrative to field staff to provide humanitarian assistance). Efforts will continue to identify all possible cost-saving measures while ensuring an acceptable level and quality of service.

Following a reduction in staff at WHO headquarters since 1992, a rationalization of procedures in the Organization's supply services has been undertaken. The greater part of WHO's air freight operations have been contracted out. Although the volume of procurement and the number of shipments have increased, because of growing WHO involvement in emergency relief operations, it has been possible to cope with the additional work with a reduced staff thanks to structural changes and improved logistics. Timely arrival of consignments at places which are difficult to access or subject to sanctions regulations has been ensured. The standardization of supplies, the development of medical kits and bulk purchasing agreements with suppliers have all led to savings of several million US dollars each year. WHO's performance in providing good quality emergency supplies at competitive cost has encouraged more donors to entrust the Organization with funds. Supply services for relief operations increased during the last two years from less than 10% to almost 20% of the total.

Since 1992 shortfalls in payment of contributions have affected the Organization's situation as regards finance. Programme delivery has been ensured by reallocating resources to priority activities and stressing value for money. Improvements in productivity through the use of microcomputers were particularly striking in the Western Pacific.

Emphasis in recruitment of personnel has been given to increasing the proportion of women in posts in the professional and higher-graded categories and enhancing the international character of the staff by recruiting from underrepresented countries through active prospection. The number of adequately represented countries increased from 99 in January 1992 to 109 in September 1994. The number of women in the professional and higher-graded categories increased from 382 in September 1992 to 405 in September 1994.
Regional highlights

Africa

With the return of South Africa and the affiliation of a new state, Eritrea, the African region now comprises 46 countries. Africa has 29 of the world’s 47 least developed countries. The remaining 17 Member States are all developing countries.

Access to health care is generally poor. The region lacks human resources for health, and there has been a constant brain drain which is being exacerbated by the severe economic recession in most Member States. Health infrastructures remain underfunded and poorly managed; coverage, while showing a steady increase, remains inadequate. Referral facilities are poorly staffed and ill-equipped, and neonatal care is often lacking. All the countries of the region have adopted the essential drugs strategy and the majority have their own essential drugs list. However, because of weak purchasing power, there is a constant shortage of standard drugs in the health services.

Per capita expenditure on health is on the whole very low in African countries, ranging from $3.5 to a maximum of $290. The population growth rate of sub-Saharan Africa between 1950 and 1990 was between 2.2% and 3.3%, resulting in an increase from 170 million to 500 million in that period. Women have an average of 6 children, 45% of the population are under age 15, and elderly people of 60 years and above constitute about 5% of the total.

Maternal mortality rates are unacceptably high, ranging from 62 to 1,000 per 100,000 live births. Most women go through childbirth without the benefit of trained assistance.

Although more progress in water supply and sanitation occurred in Africa during the international water supply and sanitation decade than in any other comparable period, to date 52% of the population still lack safe water and 68% are without proper sanitation. There is evidence that 50 million pre-school children suffer from protein-energy malnutrition. Of the 46 capital cities in the region, 19 have recently experienced civic unrest, seriously disrupting health services. Peace and security are needed if progress is to be made.

Between 1980 and 1993 the urban population increased at the rate of 5% annually, and the number of city dwellers rose from 83 to 162 million. The obvious result is that municipal authorities cannot adequately meet basic needs in housing, education, health, water supply and waste disposal.

In recent years there have been growing numbers of emergencies associated with natural and man-made disasters, ethnic conflicts and a deteriorating socioeconomic environment. In 1993 close to 16 million Africans were refugees or displaced with attendant health problems including disease outbreaks and malnutrition; 1 million of those suffered severe malnutrition.

Two major initiatives have been launched in the region—the “district health-for-all” package and “Africa 2000”, designed to sensitize the international community to the need for adequate water supplies and sanitation.

The polio-free zone in eastern and southern Africa is expanding, and considerable progress has been made towards the elimination of leprosy and dracunculiasis. For many countries, however, falling immunization coverage in the past three years has resulted in increases in the incidence of several diseases. Epidemics of yellow fever, meningitis, cholera and bacillary dysentery have not abated.

Policies, strategies and financial initiatives for primary health care have been accepted in principle by Member States, but they are often difficult to implement. Experience has shown that the key to success lies essentially in good district health management and well-defined priorities.

1 The six WHO regions vary widely in size, socioeconomic development, epidemiological characteristics, culture and history. However, within each of the regions, similar patterns of health development and largely the same health concerns are observed. Highlights are presented in the following pages.
**Americas**

The region of the Americas is characterized by great inequalities. The income of the richest 20% of the population is 28 times greater than that of the poorest 20%. In Latin America and the Caribbean 46% of the population live in poverty and half of those, or 100 million people, have no access to either private or public basic health care. Yet almost everywhere, all age groups and both sexes have experienced steadily declining death rates over the last 40 years.

Within countries, however, considerable differentials exist. In line with social and economic inequalities, health systems have tended to concentrate on district and specialist hospitals, providing care to certain social groups and neglecting vast segments of the population, especially the poor.

Urban populations are growing rapidly, creating serious social, health and environmental problems. Environmental and health care deficiencies were harshly illustrated by the cholera epidemic in 1991. Urban and domestic violence is another pressing public health concern in the majorities of the region.

The WHO regional strategy sets out five priority areas for action in 1995-1998. The first is concerned with health in development, with particular attention to policy definition and sectoral reform. The second is strengthening of health systems and services, with emphasis on decentralization and local health systems. Health promotion is the third priority area, focusing on healthy public policies, living conditions, lifestyles, food and nutrition, and the mounting problem of violence. The fourth priority area is environmental health, especially the provision of adequate drinking-water and sanitation. The fifth is control and prevention of diseases, including HIV/AIDS. The region has already been declared free of poliomyelitis, and the elimination of measles, tetanus and foot-and-mouth disease is within reach.

Public health action is targeted towards specific groups such as the elderly and the marginalized poor. Over 400 centres disseminate scientific and technical information as part of a network coordinated by the Regional Library of Medicine in São Paulo (Brazil). Over 12% of the total resources available are allocated to research and especially the improvement of research capacity and training.

The regional programme on bioethics was formally established in 1994, covering the three main areas of public health and health policy, health care particularly in the clinical field; and research and training of researchers. The scope of cooperation activities has been clearly defined. Countries remain the sole point of reference and the basis for the Organization’s action. Human, financial, scientific, institutional, moral and political resources are mobilized in several ways with cooperation between countries. Strategic alliances have been set up with multinational financing bodies (which spend over $4 billion per year in support of health activities in the Americas), with the United Nations and inter-American institutions, with bilateral donors and NGOs.
Eastern Mediterranean

Member States of the region share many common features in terms of ethnic composition, language, religion, political tradition, social values and customs. Hence many aspects of social behaviour and mores affecting the health of individuals and communities follow similar patterns. The most commonly spoken language is Arabic, and the most widespread religion is Islam.

At the same time a wide variety of political institutions exist and countries vary considerably in their socioeconomic development. At one end of the spectrum are the politically stable and rich countries with steady, well-coordinated socioeconomic development; in the middle of the spectrum are stable but less rich countries that have been able to sustain reasonable socioeconomic advancement; and at the other end there are poorly-endowed and less stable countries. In these the unsettled political situation, ideological differences, and chronic levels of armed conflict and civil strife severely hamper national development. Similarly, rising military expenditure in a number of countries against a background of economic recession does not make for smooth and unfettered progress.

The impact of inflation and unemployment as well as the continuing decrease in per capita GNP (from $1,375 in 1983 to $1,162 in 1992) has seriously affected the living standards and health status of most people, particularly in the less developed Member States. The total population, about 194 million in 1970, had soared to 298 million by 1984-1985, with an average annual net rate of increase of about 3%.

An epidemiological transition is taking place in the region, with life expectancy at birth gaining 7 years during the last decade, largely due to decreases in infant and childhood mortality.

Coverage with local health services has reached fairly high levels, the regional average being 82%. But the picture varies greatly. Only about half of pregnant women are attended by trained personnel during pregnancy and childbirth, and there has been a slight downward trend during the last few years. Great efforts will be made to reverse it.

In 1993 most countries maintained high levels of immunization of children against vaccine-preventable diseases, and of pregnant women against tetanus. There is clear evidence of significant decreases in these diseases, particularly poliomyelitis. There are already two poliomyelitis free zones in the region which have had no or few cases for some years. The rest of the region, apart from war-stricken areas, is following suit.

Countries are universally committed to the cause of health, as witnessed by the immunization carried out in Afghanistan in 1994. The warring factions allowed immunization teams and centres to work in peace and security, leading to hope of a more durable and all-encompassing peace. On another positive note, the Palestine Health Authority started its work in the self-ruled territories. Member States have been called on to provide material and personnel support, in addition to the 1% of the regional budget approved for Palestine.

Several technical guidelines and manuals covering important areas of laboratory and blood transfusion medicine have been produced and a number translated into several languages. Efforts continue towards regional self-sufficiency in quality assurance.
Europe

The last few years have witnessed an unprecedented geopolitical transformation in the European region. The dissolution of the USSR and Yugoslavia resulted in the creation of 20 new Member States. The transition from centrally-planned to market economies in those countries, with a desire for fundamental socioeconomic changes, stimulated a search for new forms of organization, financing and service provision in the health sector.

In most of the eastern part of the region the economic situation has become very critical, with serious implications for health care. In 3 countries, for example, health personnel were not paid for six months. Armed conflicts continue to rage in 9 countries. Infectious diseases are on the rise. Polio incidence has continued to decline, however, in spite of sometimes reduced coverage. A diphtheria epidemic is in progress – with some 45,000 cases registered in 9 countries in 1994. Cholera affected 27 countries.

WHO action during the year centred on humanitarian assistance to countries affected by armed conflicts; promotion of the health-for-all policy; improvement of health care; encouragement of healthy lifestyles; and strengthening of environmental health.

Humanitarian assistance has been directed particularly to countries of former Yugoslavia, with funding from voluntary contributions. Attention is given to war victims with somatic and mental health problems. Support is also given to setting up nutrition and health surveillance, guiding health care reform and planning the reconstruction of health services. Cooperation among the medical associations of countries of former Yugoslavia is fostered, and WHO has taken the lead among United Nations agencies concerned with public health and coordinates the work of NGOs. Assistance was also provided during conflicts in Armenia, Azerbaijan, Georgia and Tajikistan.

In all countries strong emphasis is placed on promoting health for all, through the region’s interactive networks such as healthy cities and the health promoting schools project, now reaching 2,000 institutions. Tobacco use remains a particular concern as international tobacco companies are engaged in aggressive marketing in central and eastern Europe and former USSR.

Because of the resurgence of infectious diseases, resources have been reallocated and specific measures taken. In cooperation with the Eastern Mediterranean region, a coordinated vaccination programme involving special vaccination days was carried out in 18 countries. A consortium of three major donors and UNICEF was set up to provide vaccines for all the countries of former USSR. Finally additional resources have been made available to combat HIV/AIDS in central and eastern Europe. In general, considerable efforts have been made at resource mobilization, resulting in a trebling of voluntary contributions over the next six years.

The European health-for-all targets, revised in 1991, provided a solid policy basis for subsequent reforms. Member States have decided that WHO should concentrate on the countries in greatest need, i.e. those in central and eastern Europe and former USSR. There is broad agreement that WHO’s special mandate must be to change Europe’s approach to health development, through catalytic action, innovation and leadership. In an effort to do this, reforms were made in regional management, and sharper target priorities established.
South-East Asia

The region has a heterogeneous population amounting to a quarter of the world total. Most Member States depend on agriculture, but are increasingly turning to industrialization. Socioeconomic development plans stress improved agricultural productivity, creation of employment, upgrading of skills, greater participation of both women and men in the development process, alleviation of poverty and provision of shelter all in a spirit of social justice and equity.

During the last decade national economies have been hurt by political uncertainty, military conflicts and natural disasters such as floods, earthquakes and drought. Instability in the Middle East and rising oil prices have also had adverse effects. In spite of this, four of the largest countries in the region have recorded satisfactory economic growth. The region accounts for almost half of the world's poor, despite efforts to curb rapid population growth which is a primary contributing factor. There are a multitude of environmental health hazards such as contaminated drinking water, industrial and agricultural waste, air pollution, noise and pesticide poisoning.

There has been a slow decline in mortality generally. The incidence of low birth weight is decreasing, with some countries reaching the global target of at least 90% of newborns weighing no less than 2.5 kg. Women's health is a matter of serious concern, especially in Bangladesh, Bhutan, India and Nepal.

Respiratory diseases, diseases of the digestive system, malaria, tetanus, diphtheria, tuberculosis and leprosy are the major causes of illness and death. The number of reported polio cases fell from 9,150 in 1992 to 4,520 in 1993. The Democratic People's Republic of Korea and Maldives have not reported any cases in the last four years. More recently cardiovascular diseases, cancer and other noncommunicable diseases have begun to rank as major causes of death in countries with the highest life expectancies, such as the Democratic People's Republic of Korea, Sri Lanka and Thailand.

Primary health care as the key approach to health development has been fully understood and accepted by all Member States, and substantial progress has been made in developing health care systems. However, curative care still predominates. Health workers at the first level are not adequately trained and some supervisors lack skills and motivation. A number of countries are launching administrative and organizational reforms in order to facilitate decentralization and local planning and encourage involvement and mobilization of communities in health development. Substantial progress is being made in health education of the public in the face of severe constraints such as low literacy levels, poor outreach of media and low status of women. Member States have agreed that no single country can stand alone in dealing with health problems such as HIV/AIDS, and have underlined the importance of common approaches and increased regional cooperation.
Western Pacific

The Western Pacific region has 25 Member countries, with a total population of more than 1.5 billion. The region is remarkable for its heterogeneity: one country has 1.2 billion inhabitants and is the most populated in the world – others are small atolls with only 2,000 inhabitants. Some produce goods and services for nearly every country in the world – others depend to a large extent on external support.

Basically the political situation is stable, with growing collaboration among countries that have common goals. The region as a whole is characterized by continuing economic growth, although this is rarely accompanied by structural adjustments to correct imbalances in income distribution. The most significant features of demographic change are urbanization, aging and overall population growth. Rapid economic and social development has allowed the building of a comprehensive basic infrastructure and the attainment of relatively high educational levels.

Countries can be grouped in three clusters according to main causes of death. In the developed countries lifestyle-associated conditions such as cardiovascular disease, stroke, cancer and accidents predominate. The gap between these and infectious diseases is rapidly narrowing in a second group of countries. In a third group communicable diseases and malnutrition prevail, associated with severe economic difficulties. Virtually all Member States, however, report a rise in the prevalence of noncommunicable diseases.

The region has six priority areas for action: development of human resources for health; environmental health; eradication and control of selected diseases; exchange of information and experience; health promotion; and strengthening of management.

The national immunization days held in Cambodia, China, Lao People’s Democratic Republic, Philippines and Viet Nam are recent examples of multisectoral and multidisciplinary approaches to mobilize different segments of society for common action. In December 1993 China carried out the largest-ever immunization campaign, reaching over 100 million children in a single day. Success has been achieved in the eradication of poliomyelitis, with the number of confirmed new cases falling to approximately 1,150 in 1993, compared with 5,963 in 1990. Prospects of having zero cases in the region by the end of 1995 are good. Progress towards the elimination of leprosy as a public health problem is likewise encouraging. Malaria continues to be a major problem for 9 countries, 8 of which have produced comprehensive plans of action. HIV/AIDS is emerging as a major health concern in the region.

In general, knowledge is available to prevent or cure many health problems, but much still remains to be done to ensure that it is used to good effect. Countries in the region are developing rapidly but economic progress in itself does not necessarily lead to improved health. A document, “New horizons in health”, has been produced providing a blueprint for health development that shifts public health thinking away from emphasis on illness towards concern for underlying risk factors and conditions conducive to health.